
# The Basic HST E-Book

A scientific approach to muscle growth

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Based on the work of Bryan Haycock

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# Introduction

What is HST? HST (or Hypertrophy Specific Training) is a set of training principles that were developed by Bryan Haycock in October of 2000 in order to optimize training for muscle size. It is based on physiological principles of muscular growth as discovered through science. There is no “bro-telligence” involved in HST, only facts as observed through the scientific method. These facts are acquired through studies, which of course are not always perfect, but are better clues as to how the body reacts to weight training than simply listening to what the bro at the gym told you. Based on the current research, HST is the most scientifically valid way to train for size.

Why haven't you heard of HST before now? If HST is really the most scientifically valid way to train, shouldn't it be well known as the best way to train for size? Good question. The answer is that as of the writing of this book, it has been nearly 13 years since Bryan officially unveiled HST in the original ThinkMuscle article. Despite being over a decade old, an official HST book has yet to be written.

And so we come to this book. People are still training using sub-par methods that produce less than optimal results. There is a clear need for some form of publication to get HST out there to the general public. The purpose of this book is very simple: to explain HST to those who do not understand what exactly it is, since it can be somewhat cryptic to the uninitiated.

I will avoid all the overly scientific talk that scares most newcomers to HST away for some reason (yes, I know, why are people afraid of science??) and stick to keeping things in clear terms that people who don't have a scientific background will readily understand. Additionally, there will be “out of the box” routines for those who want to get started quickly. We will also discuss advanced techniques for those who are more experienced with HST. You do not have to dedicate a lot of time to reading it before you can get in the gym and get started, in fact, you should be able to get it all read within one or two sittings. I won't bloat

pages with unnecessary text just to increase my word count. That is not the purpose of this book.

Who am I and why should you care what I have to say?

I am an average guy with fairly average genetics for muscle growth. Admittedly, now that I am no longer small, some people would debate my claim to “average genetics” but I promise you, I had to fight tooth and nail for every bit of muscle I have built with HST. For many bodybuilders out there, the way a person looks somehow makes their argument more valid, despite the fact that plenty of successful coaches over the years were not massive giants or extraordinarily gifted themselves. But for what it is worth, I am a lifter with almost a decade of experience with HST who is just about at his natural genetic limits as a result of many years lifting using the HST method.

I found HST in 2005 at the age of 24. Previously, I had followed various routines out of various muscle and fitness magazines with abysmal results. No surprise there, as there is no real science behind the routines you find there. I was 185.5 cm tall (6'1) and weighed 63.6 kg (140 lbs) with minimal body fat The stereotypical scrawny guy with abs. Sure I was vascular, I had veins everywhere, you could see every muscle in my body. The problem was that those muscles were all puny! What good was having visible abs if you could see my ribs through my chest? Needless to say, I was not happy with my body and had spent my entire life being “the little guy.” I was tired of it, but it felt like nothing would work for me. Every routine in all the magazines I was subscribed to promised to pack tons of muscle onto me but none of them ever worked. Frustrated, I was ready to give up on weightlifting altogether.

But I knew there had to be a better way, I just couldn't seem to find it. As my background in college was biochemistry, I decided in mid-2004 to try to find some sort of science behind muscle growth, rather than simply listening to what the magazines told me I had to do. After weeks of research on the internet, I found the HST site. It was a revelation for me. Lurking on the forums for several months, reading everything I could, I eventually began my run with HST in January of 2005. Eight years and what seems like a lifetime later, I

weigh roughly 110 kg (around 240 lbs) at about 15% body fat  People I knew when I was younger hardly recognize me anymore.  Folks I work with tend to refer to me as the gorilla or more commonly superman or hulk.  I'm no longer the little guy, now I'm known as the big guy.  It is so much different than when I was younger and smaller.  And even though I am close to my natural limits, I'm still making progress thanks to the scientifically based principles of HST.

Am I happy with my body now?  Well, not totally satisfied but a damn sight happier with it than before HST.  My confidence is much higher and this, along with the increased determination I've learned over the years of lifting, have made me much more successful in my professional life than before I began lifting.  Altering your body the way I did teaches you a lot about yourself.  You will learn how to push yourself beyond barriers and that strength of will that you gain will help you in all your other endeavors.  I encourage everyone who is unhappy with their body to make a change, do something about it.  Nothing is going to change unless you make it change.

All of my growth, I attribute to HST.  I've tried other decent routines over the years but nothing ever produces the same results for me.  HST is something that I very strongly believe in and I think that it deserves to be published in some form or another.  And that is what has lead to me writing this.  This is something I am very passionate about, to the point that I still to this day have a presence on the HST forums as one of the resident experts.  If you come to the forums and pose questions to us, it is likely that I will be one of those who will be answering your questions.  Perhaps at times with an added dose of sarcasm, but I always try to help everyone that I can as long as they genuinely want help.

My hope in writing this is that other people will be able to get as much out of HST as I have gotten out of it.  HST has changed my life and I want to help bring it to everyone else so they can experience what I have.


June 2004
February 2005
June 2005
June 2006
May 2008
May 2011
October 2011
May 2012
Sept 2012
Sept 2012

# CHAPTER ONE
WHAT IS HST?

So you've read the HST website and now your head is spinning trying to make sense of everything you read. You saw mentions of doing micro-cycles, 15 rep blocks, finding your RMs and now you don't know what to think. Sound familiar?

The first hurdle to get over when you are trying to learn about HST is the thought that HST is a set routine. HST is a set of principles for you to follow when designing a routine. The implementation of those principles can actually be quite fluid, which is part of the reason why there are so many questions from newcomers.

What are the HST principles? Here is a brief explanation.

1. Mechanical Load: Mechanical load is the primary growth stimulus, rather than fatigue, “the pump,” or whatever other supposed experts claim is the primary cause of muscle hypertrophy. Both going to failure or training for fatigue can actually be counterproductive as it stresses the central nervous system and reduces strength in the short term. Many a routine has been cut short or put on hold due to an unexpected illness caused by a compromised immune system from accumulated fatigue or going to failure too often. A muscle will always adapt in a way that is specific to the nature of the stimulus. If you train to failure constantly, generally speaking, you will end up failing at training. Not to mention dramatically increasing the risk of overuse injuries.

But you might be wondering, “time under tension is what causes growth, right? So why can't I just do a whole heap of sets with a light weight, get tons of time under tension. Then I will grow, right?” Well in this case, you have to consider the strength of the actual muscle itself. There is a minimum threshold of what that muscle can lift that must be hit before you can actually cause any kind of micro-trauma to the muscle tissue itself. The minimum load necessary is highly dependent on the condition of the muscle at the time you are lifting. It is not just the absolute load that is important but the relative load compared to what that muscle has been conditioned to. 200 lbs will not be as effective for a guy who can bench 400 lbs as it is for a guy who can only bench 250.

In addition, even when you find the appropriate minimum load to induce hypertrophy, eventually the muscle will become conditioned to this load and it will no longer cause growth. This is what we refer to in HST as “repeated bout effect” and is why HST incorporates progressive load, which allows us to stay ahead of this curve. We will elaborate more on progressive load and staying ahead of the repeated bout effect in just a moment here.

There is also the question of muscle fiber recruitment. I'm sure you read in a magazine about how you have to lift in the 8 to 12 rep range and do this or that in order to recruit all muscle fibers. Do we train for fiber type in HST? No, we do not. And here is why: You cannot train one specific muscle fiber type. It doesn't happen. There is no way to isolate them and anyone who thinks so is misunderstanding how muscle fibers are recruited. Yes, it is true that slow twitch fibers are recruited first and fast twitch after that when the muscle contracts. However, any movements that require a high amount of force (i.e. weight lifting) is going to end up recruiting the fast twitch muscle fibers. What it boils down to is that at 85% of your 1 rep max (which is roughly your 5 rep max in most instances) you will be recruiting all muscle fibers anyway. In essence, we are going to end up recruiting all muscle fibers no matter what, so what these guys who advocate training for fiber type are actually advocating is training for different metabolic pathways. In the end, it is going to be force (mechanical load) that is going to cause growth.

2. Acute vs. Chronic Stimuli: The muscle must be exposed to the growth stimulus frequently. Incidental exposure will not result in accumulated growth over time. Nobody got huge by lifting just one time. Most of the growth responses to training occur in a very small window, a couple days or so, which means that your muscles are only growing for a day or two after you lift. If you are only hitting a muscle once a week, it's only growing once a week. In HST, we hit the muscles usually three times a week. In theory, this means about three times as long growing compared to a traditional body part split. What it all comes down to is that it takes time to build muscle, in fact to reach the natural limits of muscularity that your genes will allow will likely take several years of consistent training. You will not achieve that by inconsistent training.

Put another way, look at a typical bodybuilding split. You hit biceps once a week. Growth lasts for 36 hours, basically a day and a half. So on that kind of a split, your biceps are growing only 78 days out of the year. On HST, you hit biceps three times a week, so they are growing 234 days out of the year. Is that not a dramatic difference? It would take the guy on the bodybuilding split 3 years to catch up to the growth experienced in just one year by the guy doing HST. This is assuming both had adequate nutrition. Now you may have seen plenty of guys on typical bodybuilding splits who have gotten large on those routines. However, it is worth noting that anabolic steroid usage is quite prevalent with these guys. That's why naturals doing those routines rarely make great progress over time until they eventually give up and start taking steroids. Steroids change a lot of the rules, allowing you to get away with suboptimal training and still grow.

3. Progressive Load: Your muscle tissue will adapt to the load as you continue to train. Some answer this adaptation by increasing volume by doing more reps. This will work to a point, however realistically, once your muscle has adapted to a certain load, continuing to lift that load and simply adding more reps will only be training the fatigue component. Yes, this will increase sarcoplasmic hypertrophy, you will definitely be storing more fluids in the relevant muscle tissues but as for myofibrillar hypertrophy, the actual size of your muscle fibers will not be increasing significantly, if at all, once the tissue has adapted to the load.

The moral is, it is more efficient to simply increase the load you are using. When the tissue has adapted to a load, even adding just a couple kilograms will expose the tissue to a new stimulus and cause a growth response once again. The key is to stay head of repeated bout effect so that you can keep growing. You don't need to make enormous jumps each time you progress, you just need to have consistent progression over time. Not only within the cycle but also from cycle to cycle. Your rep maxes should be increasing from cycle to cycle. If you look back at the end of a year of training and you have not gotten stronger in your core lifts, then you've done something wrong. Either nutritionally or with your training. If you follow HST properly, then this won't be a concern as long as you are eating enough.

4. Strategic Deconditioning: When progress stops or growth plateaus, it is necessary

to take a break from training. The point of the break is to allow the tissue time to 'decondition' so that it will once again be sensitive to loads used early in a cycle. We will refer to this time off as SD from this point on. SD is important for a few reasons. Studies show that growth improves after a break from lifting, so it can be just the thing you need to bust through a plateau. Obviously taking a 9 day SD is not going to revert your muscle to a totally untrained state. HST has never claimed this to be the case. What an SD does is allow some degree of deconditioning, along with a few other neat changes at a cellular level that will allow your muscles to respond again to loads that they have already been exposed to.

Remember, we want to stay ahead of the repeated bout effect (RBE) so that you can keep growing. Your muscle tissue is constantly adjusting to the loads you are using, requiring you to use heavier and heavier loads in order to overcome this conditioning. Eventually, there is a point where you simply cannot add more load to overcome RBE. At this point, the only thing you can do is to decondition the muscle so that it will be responsive to lower loads once again. SD is also a good break for your joints in order to prevent overuse injuries from occurring Additionally, it can help keep you fresh in the gym so that you don't get sick of going in there every day and lifting heavy stuff all the time.

So... now you know the primary causes for the muscle to grow. But how to form a routine from that? Well, to put it in simple terms, you want to construct a routine where you work each muscle group at least a few times a week, keep increasing the weight you use over the course of the cycle and take time off every once in a while. Simple, right? Well, not so simple at first. HST can at first be quite intimidating to those not accustomed to it. I know there have been people who have looked at HST and just could not wrap their heads around how to set it up, eventually returning to their previous routines in despair. The truth is, HST is actually really easy to set up once you really understand what it is about. Don't worry, we will give several sample routines in this book so that even if you don't totally understand what HST is, you can still run a cycle.

There are no hard and fast answers to some more detailed questions, such as how many sets per exercise to use, what lifts to use, etc, because a lot of this will vary depending

on an individuals level of conditioning and how long they have been training. Those who are more advanced and coming to HST after having made decent progress in other training programs will require a different implementation of HST than someone who is new to lifting weights.

In it's most basic form, HST consists of an eight week program broken up into four consecutive two week blocks. The first two weeks are spent doing 15 rep sets, starting out at a percentage of your 15 rep max the first day and progressing the load used over the course of two weeks until on the final day of those two weeks, you are lifting your 15 rep max. Why not start with your 15 rep max and just lift that for the whole two weeks? A couple reasons. First of all, your muscles will become conditioned to that load and it will eventually become ineffective at causing growth, so we don't want to spend a long period of time using that load. Second, after a proper SD, your muscles should be receptive to the lighter loads of the early 15s and should respond with growth. The point is not to lift your absolute max each workout, the point is to get growth all throughout the cycle by raising the load we are using consistently.

To use an example, say for instance that your 15 rep max for flat bench press is 100 kg or 220 lbs. As a general rule, you want to start off with about 75% of your rep max. So your first workout, you would be using 75% of your 15 rep max, which would be 75 kg or 165 lbs. So the goal is to start with 75 kg the first day of the 15s and be lifting 100 kg on the final day of the 15s. In order to get from 75 kg to 100 kg, you'll want to add increments of 5 kg each workout.

How will this look in practice? We will assume that in your routine, you are doing two sets for flat bench press during the 15s. So the first Monday you lift, you will do 2 x 15 x 75 kg. The next day you lift is Wednesday, so you will do 2 x 15 x 80 kg. On Friday, 2 x 15 x 85 kg, then 2 x 15 x 90 kg the following Monday, followed by 95 kg on Wednesday. The next Friday will be the last day of the 15 block and so you will be doing 2 x 15 x 100 kg.

Just like with the first two weeks, the third and fourth week you start with a percentage of your 10 rep max and progress over the weeks until the final day you are lifting your 10 rep

max. The fifth and sixth weeks you do the same thing with the 5 rep range.

The seventh and eighth weeks vary depending on the trainee and what they have available to them. Negatives are recommended to do on whatever exercises possible. Some simply progress beyond their original 5 rep max on each exercise until after so many workouts, they find a new 5 rep max for each exercise. How you handle the last two weeks is something we will go into more depth with later on.

How about exercise selection? You will hear people constantly telling you that you must include certain exercises in your HST routine. Going back to the principles, is there anything in there dictating what exercises you use? No, there is not. Technically, you could create an HST routine based solely around chest and arms. It would most likely work well for growing your chest and arms too. This sort of routine would not give you a very balanced physique and one could argue that other lifts such as various back exercises would be better suited to achieving growth in your arms. None of that really matters though. What matters is your goals and being sensible about things.

We do prefer to work as efficiently as possible in HST. So forming a base for your routine out of compound exercises and then building upon that is definitely encouraged. I think you'd be crazy or stupid to do as in the previous paragraph and only work arms and chest, but it's your body and not mine. However, if you are trying to build anything remotely resembling an aesthetic physique, then compounds should comprise the bulk of your routine.

In the next few chapters, I will cover lift selection, beginner routines and how to handle the seventh and eighth weeks of an HST cycle. And after that, of course, I will give example routines for those who have progressed beyond the beginner stage.

# CHAPTER TWO
EXERCISE SELECTION

First things first, you need to figure out what exercises you will be using. For those who are newer to bodybuilding, the major muscle groups typically worked in a routine are as follows: Quads, Hamstrings, Calves, Pecs, Shoulders, Lats, Traps, Biceps and Triceps. There are others, such as the forearms, erectors, abs, etc but by and large these don't matter for constructing a routine as there will be significant overlap.

**Quads** Recommended lifts: Back Squat, Front Squat, Leg Press.

The basic exercises one would use for an HST cycle to hit the quads would include squats, both the back squat and the front squat variation. Leg press is another solid compound exercise for the quads, as well as hack squats. Lesser exercises for the quads would be leg extensions or lunges, these are discouraged for usage as your main quad exercise because they are less productive. The conventional deadlift is one lift that people sometimes use for hitting the whole leg but they aren't very quad dominant in comparison to the squat. The conventional deadlift is a more posterior chain focused lift, so it hits the hams, glutes and back primarily. It is generally discouraged to do both squats and deadlifts in the same workout as it can be physically draining for most trainees as well as hammering the crap out of your lower back when you get into the heavier 5s. If you are a beginner, you may be able to get away with it since your strength levels will not yet be that great. Once you are deadlifting more than twice your body weight, it is probably not a good idea to squat and deadlift in the same workout.

**Hamstrings** Recommended lifts:Romanian or Stiff Legged Deadlift, Glute-Ham Raise

Hands down, I would always choose the Romanian or Stiff Legged Deadlift for my hamstring exercise over anything else. Glute-ham raises can be very productive too if you have the equipment to do them. Leg curls are acceptable as a hamstring exercise as well if you for some reason cannot do the RDL or SLDL. One caveat is that these two deadlift variations can be someone hard on the lower back. However, I would encourage anyone find these too taxing on the lower back to look into strengthening their lower back.

**Calves** Recommended lifts:Any kind of calf raise is acceptable

There is no magic recipe for calf growth. People think that they must do some special exercise they read about in some magazine to get their calves to grow. Truth is, calves seem to be one of those muscle groups that are highly dependent on genetics. Some people seem to do everything under the sun that they can do to grow their calves but never see any success. Others don't even work them and get large calves. One thing I will point out is that you must do your exercises in a sensible fashion. Don't bounce at the bottom of calf raise. Don't stretch it too far at the bottom either, you don't want to injure something.

**Pecs** Recommended lifts: Bench Press variants, Dips

It doesn't really matter what variant of the bench press that you prefer. Flat bench, incline bench, decline bench, they all will work. Whether you use dumbbells or a barbell is up to you. I prefer barbell benching personally, as lifting massive DBs into position for a set is a massive pain in the ass and it is easier to increment loads with a barbell. But it doesn't really matter in the end as long as you can progress the load over time.

Weighted dips are another tremendously awesome exercise. If you cannot do body weight dips yet, I advise you to find an assisted dip machine and start working on those dips. In fact, I would use an assisted dip machine anyway if you do weighted dips in an HST cycle as this will allow better progression over the course of the cycle. If you decide to go this route, you would need to use your total load to figure increments for dips. For example, let's say that your 5 RM for weighted dips is you with a 20 kg plate hanging from your waist. You weigh 100 kg, so your 5 RM for dips is really 120 kg. This does require some math to figure out the increments, and obviously you'll be starting the 15s at below your actual body weight, which is where the assisted dip machine comes in...

Exercises to avoid for pecs are flies, pec deck or cable crossovers. These are nearly useless in the context of an HST cycle as your prime mover for pecs since increments will be difficult and your RMs will be pathetically low in comparison to dips or bench press. They can

be useful as metabolic work, but that is something we will cover in the advanced routines section.

**Shoulders** Recommended Exercises: Overhead Press variations

Shoulders are the one muscle group that people seem to want to do the most lifts for. You don't really need to do a lift for rear delts, one for middle and one for front delts. If you are doing an overhead press and you intelligently pick your back exercises, you should not need to hit all three heads of the delts with different lifts.

This adds unneeded extra volume for such tiny muscles. Save that extra volume for a large muscle group that needs extra lifts to hit all your bases, like perhaps the back? The back is quite literally many times larger than the shoulders, yet people will do more exercises for those tiny little delts than they do for the back? You can do military press, push press, seated press, DB presses, whichever works best for you. Using a barbell is probably easiest for incrementing over the course of a cycle. On the other hand, many people seem to prefer DBs for shoulder health, arguing that it is better for their shoulders than a barbell. It's up to you, again the key is that you need to be able to progress the load over time. Lateral raises are a good exercise to include as a prime mover for delts instead of an overhead press if you are a small child or want to be the size and strength of one. Lateral raises are good for metabolic work, however.

**Lats** Recommended Exercises: Pullups, Chin ups, Pulldowns

There is a lot of debate on the internet about the difference between pullups and chin ups, whether to use a wide or a narrow grip, whether to have your pinky sticking up while pulling yourself up to the bar... I don't really care about any of that. For my purposes, chin ups are a supinated grip and pullups are a pronated grip. Obviously a neutral grip is also an option. What width you use is up to you. The important thing is that you can do them. If you cannot do them with just your body weight, follow my advice for dips and find an assisted machine. Include them in your cycle and base your RMs on total load, keep progressing with

them until you can do them with added weight. Chin ups and pullups are exercises that lend themselves very well to doing negatives.

Pulldowns are also an acceptable exercise. Again, grip on these is up to you. Pullovers are basically useless for most people since form is extremely suspect in most trainees to the point that I doubt most people are even working the lats when they are doing "pullovers." If you can do pullovers with proper exercise, then by all means, feel free to include those.

**Traps** Recommended Exercises: Rows of any type, deadlift, rack pulls

It is a common mistake that people make to assume that the traps include only that bit of muscle between your shoulder and your neck. Check an anatomy chart and you will see that the two major muscle groups in the back are the lats and the traps. Yes, there are some other smaller muscles but for the most part any lifts you do to hit these two major muscle groups will hit those as well.

Depending on what sort of row you choose, you might not be hitting the erectors real hard, but don't worry, they get work from those lifts you are doing for your legs as well, albeit only as stabilizers in some cases. Also, depending on what other exercises you are doing, you may want to adjust what sort of row you choose. Bent over rows are always a good lift and they do work the erectors pretty well, but if you are doing deadlifts then you may want to do a seated cable row or a chest supported row instead. There is nothing magical about tbar rows, so don't think that if you choose those as your rowing exercise that you will somehow make superior gains compared to if you chose bent over rows. Mostly what you want to focus on here is which rowing exercise do you have the best form with, which is most comfortable for you and which fits into your workout schedule the best? Don't pick seated cable rows if you have to wait around at the gym for an hour to use it almost every time you go there.

What about shrugs, you say? Yes, you can include those in addition to a row. Note that I said "in addition to" and not "in place of." You want to pick a rowing exercise first, this

will be your primary mover for developing back thickness, the shrugs will be secondary. Upper traps grow fairly easily in most trainees so you shouldn't be too worried about it. If you are including deadlifts in your routine then you probably don't need to do shrugs at all. Rack pulls are another exercise that is effective when done properly. You can typically use loads much greater than your deadlift and it places a tremendous amount of tension on the back. However, I discourage it's general usage for most simply because it tends to be performed incorrectly, which is discouraging to me since it is such a rarely used exercise as it is.

**Biceps** Recommended Exercises: Doesn't really matter, just do whatever.

Obviously you want to pick something where you can maintain good form. Generally the issue most people have with biceps is that they are working them too much. Biceps are one of the few muscles that almost everyone can see almost all of the time, so people tend to focus too much on them. Just pick a lift and progress it like everything else, and do it at the end of your workout after you've already done all the money lifts that are actually important. Clearly, when you get to the heaviest loads of the 5s, it will be difficult to maintain perfect form with any sort of curl, but you should endeavor to do your best to minimize any body english during curls. Biceps (in addition to delts) are probably one of the most overworked muscle groups in most gyms across the world. I see people every day doing five different types of curl but only one exercise for back. You don't need to hit biceps that hard, I promise you.

**Triceps** Recommended Exercises: Close grip bench, skull crushers, tricep extensions

If you want bigger arms, you are better off hitting the triceps hard rather than the biceps since they make up a larger part of the upper arm. Pushdowns are a common recommendation for triceps. As most people have a hard time keeping proper form, I do not recommend pushdowns as the primary mover for triceps. This is especially true when you get into very heavy loads.

Close grip bench is a good lift as it will allow you to pile the weight on and has less of a

chance of decapitating you or smashing your face in compared to skull crushers, but it mostly comes down to personal preference and which lift you are more comfortable with. Tricep extensions are alright but I would put them after the other two in priority as it definitely has the greater chance of stressing your elbows out of all the lifts mentioned above for triceps. Always be mindful of your elbow health when hitting the relatively small muscles of the arms. An overuse injury in the elbow can seriously hamper your training.

**The others** Recommended Exercises: Shutting up, just lifting

What about my abs? What about my serratus? Should I be doing wrist curls and reverse wrist curls?

The answer is no. Abs are the only reasonable one. Include them if you want or don't. Working abs will not give you a six pack. Doing them as part of HST will make your abs stronger and larger, but it won't get rid of the fat over your abs. Visible abs are a function of diet and body fat percentage. You can't shred up your midsection while trying to grow big muscles anyway, so developing visible abs should not be a concern for you at this point. For one thing, spot reduction of body fat is not possible. In most men, abdominal fat is the last to go when you are dieting down. For another, simultaneous gain of muscle and loss of body fat is unlikely to occur in most lifters unless they are total newbies or obese. For our purposes, that of building as much muscle as naturally possible, we should be focusing on eating for size.

To everything else... there really is little point in doing little foo foo lifts like wrist curls or what have you. Most everything you do in a well rounded routine is going to hit all those tiny muscles that some OCD bodybuilders worry so much about. Grip work, tire flipping, pushing prowlers, etc are all activities that have their place but their place is not in HST. If you want to do those things, that is fine, but do not include them as part of your HST cycle. I would strongly recommend that you seriously consider not doing those things during the time you are doing HST and instead do them opposite HST.

If you are aspiring to get into strongman someday, just as an example, then you should train exclusively for that. If you just want to pack on some size so you will be able to do better in strongman, then take a break from strongman training and do HST for a while to get the size on before returning to strongman training. This applies to other sports specific training. HST is good at putting muscle on, it is pretty good at building strength too but it's not going to make you better at tacking people in football or running a 50 meter dash. This isn't to say that you can't do these things at the same time as HST, just that it is not as effective. It is better to have a clear focus rather than trying to improve multiple things at once.

It is also worth noting that if you do multiple things at once, such as boxing and HST, it will effect your required nutrition. See the Eating for Size chapter. You will need to figure these things in to your diet or you will not be able to get in adequate calories to grow while doing HST. This is one of the biggest reasons that I discourage people from trying to do these things all at the same time. It is not impossible. I myself did heavy kung fu training my first two years of HST while making good muscle gains and I know others on the HST forums who have done boxing and HST. It just requires a lot more attention to all the details if you are going to succeed.

# CHAPTER THREE
PUTTING IT ALL TOGETHER

So you've picked out your lifts, now you are ready to get in the gym and start getting swole. But wait, you're not ready yet. You've still got some work to do. You need to find your maxes then you need to set up your routine. When you are finished with this step, you will have a plan for every single day that you will be lifting. You will go into the gym for each workout knowing exactly what lifts you will be doing and exactly how much you will be lifting for each exercise.

So the next step is finding your maxes. What is a rep max? Simply put, it is the maximum amount of weight you can do for a specific number of reps. So your 15 rep max would be the most weight you can use and still get 15 reps. Ideally, you would want to find your 15 rep max, 10 rep max and 5 rep max for each exercise.

If you've picked out a lot of exercises to do, this could take several days. I recommend taking at least a week and spending three or four days in the gym finding your maxes. If you've been lifting for a while already, then you may already know your max for some lifts. What I generally will do is use a test weight that I suspect would be around my 5 rep max, and if I get 7 or 8 reps with it, then I just consider it my 7 or 8 rep max and use a calculator to estimate my 5 rep max. Google “rep max calculator” and you will find tons of results, most of which should work for your purposes.

As an example, say that you go in to the gym and you manage to bench press 100 kg for 9 reps. Using the calculator at exrx.net that you just googled up on your phone, you find that my 5 rep max is estimated at 110 kg, your 10 rep max at 90 kg and your 15 rep max at 77 kg. Since you are still at the gym, using your phone to check this, you go ahead and attempt to bench 110 kg for 5 reps and just manage the 5 reps. At this point, you can be reasonably sure that your 5 rep max is accurate. Now you'll come back after a day off and test your other maxes.

If you use this method, it is encouraged that you at least go in after calculating your maxes and try them out to make sure that they are accurate. Obviously doing them all in one day is not the best idea and probably will lead to inaccurate results.

Once you have your rep maxes, now you are ready to set up routine. As explained in Chapter One, you want to start with a percentage of each rep max and progress up to it. So using our example of the bench press, we will map out each day of the cycle for bench press.

We will assume you are lifting on Mondays, Wednesdays and Fridays. So for the just bench press, the entire cycle would look like this:

| | Repetitions | Monday | Wednesday | Friday |
|---|---|---|---|---|
| WEEK 1 | 15 | 52 kg | 57 kg | 62 kg |
| WEEK 2 | 15 | 67 kg | 72 kg | 77 kg |
| WEEK 3 | 10 | 65 kg | 70 kg | 75 kg |
| WEEK 4 | 10 | 80 kg | 85 kg | 90 kg |
| WEEK 5 | 5 | 85 kg | 90 kg | 95 kg |
| WEEK 6 | 5 | 100 kg | 105 kg | 110 kg |

But wait a minute, you say? Why am I starting out with less in the 10s than I finished with in the 15s? And in the 5s as well, you say?

This is called zig-zag and is totally fine. The main thing here is that we want to be progressing over the course of the cycle. Just because you lifted 77 kg for 2 sets of 15 reps on Friday does not mean that 65 kg for 2 sets of 10 on Monday will be totally useless for hypertrophy. The way that HST is setup, we are staying far enough ahead of the curve that your muscles will not become conditioned to the loads so fast that this is a problem. Additionally, this can be beneficial as a brief period of recovery after lifting your RM the previous Friday.

What about weeks seven and eight? That depends. It is recommended in the original HST articles to do negatives where possible. For most people who don't have a training partner, negatives are not feasible for most lifts. So you do have a few options here. You could keep using your 5 rep max for the next two weeks, as that load is heavy enough that it will still cause growth for a good couple of weeks.

Or you can attempt to continue incrementing each exercise beyond your 5 rep max each workout. You will most likely have gained strength over the course of your HST cycle, unless you are eating like a sparrow, and will now be able to lift more for 5 reps than you were when you tested your maxes prior to the cycle. So if you have been increasing the load by a couple kilograms each workout, then the workout after your 5 RM session, you could try adding another couple kilograms to your lifts and see what happens. In doing this, you will eventually be unable to increase the load further, which will mean that you just found your new 5 RM. And that's great since then you can use that new 5 RM to build your next cycle.

Yes, you want to find new rep maxes before starting the next cycle. Always take a couple days at the end of a cycle to test new maxes before you take time off prior to the next cycle. Do not test maxes after your SD, this is a somewhat common mistake that some newcomers make. Now if you followed my advice in the previous paragraph and have found all new 5 RMs for each lift, you don't really have to go in the gym and find new 10 RMs and 15 RMs. You could use your strength gain in the 5 rep range to judge how much to add to your 10 RM and 15 RM, or use a calculator to estimate new ones based on your 5 RMs. Just remember, SD is a critical part of HST. Taking appropriately timed breaks improves your growth potential for the next cycle.

So now you've got your maxes figured out and you've figured out all the loads you will be using for each exercise. What's next? Volume? How many sets of what should you be doing? Generally, it is a good idea to start with 1-2 sets for everything your first HST cycle. Some lifts you would want to do 2 sets, some only 1. For example, for back you chose bent over rows and barbell shrugs, you would want to do 2 sets for the rows and only 1 set for the shrugs because the rows are the priority. Pretty much any arm work you would want to stick to just 1 working set. After your first cycle, you should have a better feel for where and if you need increase volume.

As a general rule of thumb, you should increase volume only if you are never sore, you are never tired after your workouts and you are not growing despite steadily gaining weight. Obviously if you are not gaining weight at all, that is a diet issue and not an issue of volume.

No routine is going to magically put muscle on you without the necessary calories and protein to build the muscle. On the other hand, you would want to maintain volume if you are slightly sore after workouts most of the time, you are tired enough at night to sleep well but not so tired that you are losing the desire to lift and your muscles are noticeably fuller. Lastly, you would want to decrease volume if you are tired most of the time but still don't sleep well, notice any sort of strain in your joints or other over-use pain, strength levels are plummeting and if you notice your immune system seems very poor.

Overtraining or overreaching is not something that we want to do in HST. This tactic is one that improves performance, not hypertrophy. As such, be mindful to keep volume low enough to avoid this. Many people try to increase volume above what they need to grow in an effort to improve their gains, but the reality is that the minimum volume necessary to grow is going to be more effective than using the maximum volume you can handle. If you ever get to the point where you are truly overtrained, a simple nine day SD is not sufficient to alleviate the symptoms of overtraining.

Lifting order is not critically important as long as you can be sensible about it. If you choose squats, romanian deads, bench press, military press, pulldowns, bent over rows, shrugs, barbell curls and skull crushers for your routine, you would definitely want to put the arm work last. Squats you may want to do first since they will likely require the most energy of any of the lifts. Or you may want to do squats nearly last, just before the arm work, so it doesn't wipe you out for the rest of the workout. It really just depends on your personal preferences. But be sensible. If you put curls as your first lift in that routine, you are just asking for trouble since strained biceps are going to compromise some of your other core lifts. Just be mindful that at first, you may have to experiment a bit with the order of your lifts. Supersets or things along those lines are not something I would recommend but it is up to your discretion whether you want to do something like that.

Rest periods? This isn't terribly important either. Rest long enough to regain your strength for the next set. In the 15s, this will likely be 30-60 seconds. In the late 5s, you may have to rest up to five minutes between sets of heavy squats, just to catch your breath.

Again, be sensible about it. Resting 15 minutes between sets during the 15s is a pretty poor idea. During the lighter weights, you do want a bit of fatigue accumulation during the sets, so extending rest periods is not the best thing to do. During the heavier end of the cycle, if you do not get enough rest between sets, you will not be able to complete all your reps.

Rep speeds? The tempo of your reps isn't going to make or break your cycle. In general, you want the eccentric to be a bit slower than the concentric, the concentric a bit faster than the eccentric. But you must be in control of the bar at all times. Don't let gravity be in control of it. Obviously reps during the 5s will be slower than during the 15s, that's just the nature of how things work. If you desire, you can slow the reps down a bit during the lighter portion of your cycle but you never want to cross the line into “superslow” style training. Some people do like to consciously slow down reps during the lighter loads of an HST cycle so that it is more challenging to lift. However, keep in mind that how challenging a workout feels to you means little, what is important is the effect on your muscles. Your muscles do not care how challenging a workout is, all they know is contracting or not contracting.

Do I have to SD if I am still gaining strength in the last weeks of a cycle? This is a good question. Remember, the purpose of SD is to restore growth potential after gains have stalled. If you are still making gains at the end of your cycle, feel free to draw the cycle out as long as possible. I've had cycles last 12 to 15 weeks before. Once you progress beyond your old 5RMs in week 7 and 8, you will be dealing with loads that will be effective for at least a week or two. There is no reason that the Monday after hitting your 5 RM day that you cannot simply lift your 5 RMs again. On Wednesday, you may attempt to increment the load and find that you can get 5 reps on most of your lifts with the new loads. You could then continue to use those loads for another few sessions before continuing to increment further. Eventually, strength gains will stop. They will probably not stop for all lifts at the same time, so you may find progress in bench stall and then a week later your deadlift stops going up. I would urge you to draw your cycles out at long as possible.

The moral is that there is no real need to SD if you are making progress still as long as you are not experiencing any overuse symptoms, joint aching, overtraining signs or similar.

Remember, the goal of SD is to stay ahead of RBE, if you are not stalling then you are still ahead of RBE and thus no need to SD. This doesn't mean that you should never SD. You will always eventually stall out and need an SD. Furthermore, if you are getting sick of working out and growing discouraged, that is a good time to take an SD. Sometimes I take a week off from lifting just to focus more on the other things in life and renew my motivation for the gym when I return. So you will SD eventually, just don't feel like you must do it every eight weeks without fail if you are still making progress.

Spreadsheets are your friend. Learn to use a spreadsheet program to organize your routine. Or download a spreadsheet someone else has already made. It will help you immensely. There are several spreadsheets available on the HST forums and many of the forum members have spreadsheets of their own that they would be willing to share if you ask. Get a notebook or something similar in order to log your workouts. You want to log everything. Always go into the gym each day knowing what you are going to be lifting. And after you lift it, make a note of how much effort you had to exert in order to lift it. This will help you judge inadequacies in diet, sleep, etc and help you adjust from there.

Warmups? This is a matter of great contention amongst newcomers. What should I be doing to warmup? Well beyond the obvious of actually increasing the temperature of your body and getting the blood circulating, which you can easily accomplish through a few minutes of light treadmill work or some light calisthenics paired with some dynamic stretches, you also want to warm up the individual muscle groups for the loads they will be lifting. Your warmups do not need to comprise the majority of your workout. Warmups are something that will likely need to be personalized by yourself over time to whatever works best for you, but I will go ahead and cover a general rule of thumb for warming up anyway.

You don't need to even do warmup sets at all during the 15s as the loads are light enough that it is not necessary. During the 10s, start with a load that is 70% of your working weight for that day and do a set of 5 with that load. That's all you really need during the 10s. Once a muscle is warmed up, you don't need to do warmups for other lifts that use that same muscle unless you feel the need to. During the 5s, as a general rule, you should do a set of 5

reps with 50% of your working load, followed by a set of 3 with 70% of the working load. At this point, if you do not feel sufficiently warmed up, do another set of 3 reps with 80% of the working load before moving on to your working sets. Remember to tweak these rules as necessary. Once you become more advanced, you will find what level of warming up works best for you. Some may need more, some less. Sometimes it depends on what muscle group you are working. Generally, as you become more advanced, you should require less of a warmup for most working loads. And remember, do not let the warmup unnecessarily bloat your workout.

One last thing: Getting bigger is all about consistency. If you make an HST plan, it isn't going to automatically pack muscle onto you unless you get in the gym and make the time to get the calories in. For most of us, we are working 40+ hours a week and it may seem hard to make time to lift. But how many hours do you spend playing Call of Duty or building a mansion in Minecraft? If you can't scrape together three hours a week to lift, there is no point in continuing reading.

Getting the actual workout done is often a matter of motivation. If you don't enjoy your time in the gym, you will find excuses to not go in. “I'm too tired today” or things along those lines. The easiest way to keep yourself motivated is to make it a habit. Turn the routine of getting ready for the gym into a ritual. This not only helps make it a habit but also the ritual will help you get yourself into the appropriate state of mind prior to going to the gym.

Something I often tell people when they ask me how I got to where I am, how I found the willpower to radically change my body, is the following: There is no “try” - there is only do or do not. It is not a matter of finding the willpower to do something, don't let yourself fall into the trap where you make excuses for not sticking to your routine or your diet by saying “well, I didn't have enough willpower.” You either do it or you don't do it. How badly do you want to change your body? Answer that question in the gym lifting heavier every week, answer it in the kitchen, fueling the growth by getting adequate nutrition. Either you want to change your body enough to do it or you don't.

# CHAPTER FOUR
SAMPLE ROUTINES

Now, let's talk about sample routines. Everyone has to start somewhere. Everyone comes to HST and wants to tweak the crap out of it, trying to “optimize” HST and somehow optimize their gains. The truth is that the cookie cutter routine that Bryan built as the example for HST will bring you gains as long as you implement it properly.

Furthermore, someone who is new to HST does not to be tweaking things to try to optimize their routine. This needlessly complicates things and we know that HST is already fairly complicated for newcomers to understand. I had dozens of questions through my first few cycles of HST and most other people do as well. So it would behoove you to run at least a few basic HST cycles before you start trying to mix things up.

Here is a sample routine that will work well for someone new to HST and covers all your bases, I would actually recommend beginner lifters and newcomers to HST to simply run this routine for a couple cycles until you've got a good feel for how HST works.

| | |
|---|---|
| Squat | 2 sets + warmup |
| Romanian Deadlift | 1 set |
| Standing Calf Raises | 2 sets + warmup |
| Flat Bench | 2 sets + warmup |
| Weighted Dips | 1 set |
| Bent over Rows | 2 sets + warmup |
| Weighted Chins | 1 set |
| Military Press | 2 sets + warmup |
| BB Shrug | 1 set |
| BB Curl | 1 set |
| Tricep Extensions | 1 set |

This is a basic routine but it is a lot of exercises, some people on the HST forums would probably tell you that it is too many to do. However, keep in mind that you are actually doing less than 20 sets per workout. Over the course of a week, this is comparable to or even less volume than a traditional bodybuilder bro-split. The majority of lifters, aside from those who are beyond the intermediate level, will do well on this level of volume.

Now let's say you are beyond the beginner stage, you are an intermediate lifter and now you want to try some other lifts, such as conventional deadlifts and things along those lines? You could just add those in as well but then your routine will definitely be getting too bloated. So your next option for a basic routine is to alternate. This is a good option for intermediate lifters and something I recommend to anyone beyond the beginner stage. Alternating allows you to do more exercises without bloating your routine too badly. Basically, you will create an A routine and a B routine, you will do A routine one day, then the B routine the next time you lift.

Here is an example:

| A Routine | B Routine | # of Sets |
|---|---|---|
| Squat | Deadlift | 2 sets + warmup |
| Romanian Deadlift | Leg Curl | 1 set |
| Standing Calf Raises | Seated Calf Raise | 2 sets + warmup |
| Flat Bench | Weighted Dips | 2 sets + warmup |
| Bent over Rows | Weighted Chins | 2 set + warmup |
| Military Press | Military Press | 2 sets + warmup |
| BB Curl | DB Curls | 1 set |
| Close grip Bench | Tricep Extensions | 2 sets |

This allows more variation in exercise selection without adding in more volume. This is a popular option for those who want to do both conventional deadlifts and squats but cannot handle them in the same workout. Generally speaking, for anyone above a beginner strength level, doing squats and deadlifts in the same workout three times a week will be a bit too taxing, so splitting them up is a better option for most than only doing one or the other.

You still want to start out each lift at the same percentage of the rep max that you would use in the beginner routine. Your cycle will last the standard amount of time, but you will have only three increments per rep range instead of six like in the beginner routine. Increments will be larger and progression will look a little different. This may seem confusing but the handy chart that follows should show visually how it would work. We will chart out two

lifts that we are alternating with each other, namely the squat and the deadlift. We will assume your 5 RM for squat is 160 kg and deadlift is 200 kg.

| | Lift | Repetitions | Monday | Wednesday | Friday |
|---|---|---|---|---|---|
| WEEK 1 | Squat | 15 | 80 kg | | 95 kg |
| | Deadlift | 15 | | 95 kg | |
| WEEK 2 | Squat | 15 | | 110 kg | |
| | Deadlift | 15 | 115 kg | | 135 kg |
| WEEK 3 | Squat | 10 | 95 kg | | 115 kg |
| | Deadlift | 10 | | 120 kg | |
| WEEK 4 | Squat | 10 | | 135 kg | |
| | Deadlift | 10 | 145 kg | | 170 kg |
| WEEK 5 | Squat | 5 | 110 kg | | 135 kg |
| | Deadlift | 5 | | 140 kg | |
| WEEK 6 | Squat | 5 | | 160 kg | |
| | Deadlift | 5 | 170 kg | | 200 kg |

One key thing to note is that you will be hitting your rep maxes on two different days for every rep range. In this instance, on week 6 you will be hitting your 5 RM for squats on Wednesday and then doing your 5 RM for deadlifts on Friday as well. So obviously adequate sleep and proper nutrition become even more important on this sort of a setup.

The big bonus to alternating is that an intermediate lifter can become familiar with a wider variety of lifts, as there are several that are worth doing. If you only ever squatted and never deadlifted, you would be missing out. Also, in theory, you should be getting better overall growth due to hitting muscles in different ways. Sure, squats and deadlifts both use the legs but there are several key differences. For example, deadlifts hit the back rather heavily and are good for ham development as well. Squats are a more quad intensive lift typically, depending on form.

So now you are beyond the intermediate level and you are becoming advanced. What to do now? After alternating, the next step would be splits. A split is when you split the

muscle groups up into separate days. An extreme example is the typical bodybuilder split where you work one muscle group a day and go to the gym 5-6 days a week. Obviously this sort of split is not a good idea, as the muscles will not be exposed to a chronic load but rather acute bouts once a week. Why allow each muscle group to spend at most 36 hours a week growing when they could be in an anabolic environment almost the entire week long?

So when designing a split routine, it is important to keep the frequency rule in mind. The minimum you want to be hitting each muscle group is twice a week. That is the bare minimum. Keeping that in mind, one good split is an upper/lower split where you would be lifting four times a week. Generally this is structured so you are doing your upper days on Monday and Thursday, your lower days on Tuesday and Friday. Obviously there is some play there with which specific days you actually lift.

Here is an example upper/lower split:

| Upper Day | Lower Day | # of Sets |
|---|---|---|
| Incline Bench | Squat | 2 sets + warmup |
| Bent over Rows | Romanian Deadlift | 2 sets + warmup |
| Weighted Dips | Leg Extensions | 2 sets |
| Weighted Chins | Leg Curls | 2 sets |
| BB Shrugs | Standing Calf Raises | 2 set + warmup |
| Military Press | Seated Calf Raises | 2 sets |
| BB Curl | Hyperextensions | 2 sets |
| Close grip Bench | Weighted Crunches | 2 sets |

The volume listed is just for example purposes. Obviously, as detailed earlier, you would need to tailor volume to yourself. 2 sets for each would be a good starting point to build from. The upper/lower split is probably the easiest to manage. There are others, however, such as the push/pull split, where you do all your pushing exercises one day and all the pulling the next. This one is good in helping to ensure you have a balance between pushing and pulling exercises, if that is something you struggle with.

As you become more advanced, you can start to incorporate per workout regulation of volume. This is a slippery slope as some lifters will use this as a cop out during workouts that are especially intense. However, for the seasoned lifter who knows their body, regulating volume per workout based on your condition during that workout is more productive than blindly sticking to a certain number of sets and reps. Everyone knows that you will be capable of better performance on days when you got plenty of sleep the night before, ate a carb heavy meal for dinner or are particularly motivated. Conversely, if you got inadequate sleep, ate poorly prior to the workout, performance will suffer.

The idea is to either aim for a range of sets, for example when you plan out your routine, rather than say that you will do 2 sets for squats, you might say 1-3 sets. Then depending on how you feel that day, you either do 1 set or you do all 3, or maybe you only do 2 sets. The other way to go would be clustering, which is basically aiming for a rep total and not using sets at all. If you clustered, then you could just set your rep target during the 5s as 15-25 reps total, and once you get into that range, just stop when you feel necessary.

Let's pause for a second and discuss clustering real quick, as this is a common tactic used by advanced lifters and the meaning to which may not be obvious to more novice lifters. When you cluster, as I said, you will aim for a rep total instead of a certain number of sets and reps. So if normally during the 5s, you do 3 sets of 5s, when you cluster, you may just aim for 15 reps. What is the difference? Well, when you cluster, instead of stopping at 5 reps, you would go until you are a rep or two away from failure. Then you would rest just as you normally do between sets before resuming your reps.

In practice, this will look similar to this. You are doing squats with 100 kg. You want to do 20 reps total, so you begin squatting and you bang out six reps no problem. On the seventh and eighth reps, the bar is slowing down noticeably as you go up, so you know that you are getting fatigued and that it is time to take a rest. You stop. After a minute of rest, you are ready to go again. This time you get five reps fairly easy and on the sixth rep, the bar is slow going back up, so you stop and rest again. Next time, you manage six reps again, just barely making the sixth rep. You've hit 20 reps. In your log, you notate it as follows: “Squat:

100 kg x 8, 6, 6” and then move on to your next exercise.

Now for those who have achieved relatively high strength levels in proportion to their body weight, it sometimes becomes necessary to stop progressing some lifts to the heavier weights. In these instances, those trainees will often take the lifts for smaller muscles, such as curls, tricep work, etc and keep it at a higher rep range. The larger muscle groups are still done with the standard rep ranges. So while they are in their 15s for most muscle groups, they would keep these specific lifts in the 20 rep range, during the 10s they will do 15s for these lifts and during the 5s they would do 10s. The point is to not expose vulnerable joints (example, elbows) to the heavier loads they might be exposed to during the later 10s and 5s.

Another common change for advanced trainees is the addition of metabolic work. This is high rep work done after the main workloads are done. An example is after a few heavy sets of weighted chin ups, you might do a couple sets of 15 reps on pulldowns with something approximating your 15 RM. This is only done during the 5s and sometimes during the 10s. Obviously this is not needed during the 15s.

Why do metabolic work? Due to the nature of increasing load, you will have to decrease volume over time in order to continue to progress the load. There is no way you can do as many total reps with your 5 RM for squats as you could with your 15 RM for squats. Go on, try it. Do 3 sets of 15 with your 15 RM. That's 45 reps. If you were to do as much total volume with your 5 RM, you would have to do 9 sets of 5 with your 5 RM. Is it possible? Yeah, maybe, but it would probably take most of the day.

In practice, this is not feasible and so invariably, volume decreases over the course of a cycle. Why is this a concern? Well, as you drop the volume, you are also reducing the metabolic demands on the muscles in question. This, in turn, reduces the activity of ERK ½, a signaling protein which is known to be involved in the process of hypertrophy. So in order to increase the loads over the course of the cycle but not reduce the action of ERK ½, we have to add in metabolic work.

You can do this through drop sets or simply high rep “burn sets” done after your heavy work is all finished. Is this totally necessary? No, and for most beginners it is not recommended. Those who are early in their training need to focus on building the foundation. For those who are more advanced, adding in metabolic work is one easy way to try to optimize your growth potential. In addition, you will find that in the heavier parts of a cycle, your muscles look fuller due to the increased fluids in the muscles which definitely helps keep you motivated to complete your cycle.

You can also combine metabolic work with clustering. The way this would work with clustering is that you would do all your heavy work in clusters as usual and when it comes time to do the metabolic work, either do standard sets with high reps, or simply set a high rep target. Either way is viable. You can even use a range. I've had success using 30-45 reps total as a target and clustering for metabolic work. Doing something like Load x 18, 12, 10 or something similar works well and really gets the blood flowing to the area.

Here is an example of a routine incorporating metabolic work during the 5s:

| Upper Day | Lower Day | Repetitions | # of Sets |
|---|---|---|---|
| Incline Bench | Squats | 5 | 2 sets + warmup |
| Seated Dips | Leg Extensions | 15 | 2-3 sets |
| Weighted Chins | Romanian Deads | 5 | 2 sets + warmup |
| Pulldowns | Leg Curls | 15 | 2-3 sets |
| Seated Rows | Standing Calf Raises | 5 | 2 sets + warmup |
| BB Shrugs | Seated Calf Raises | 15 | 2-3 sets |
| Military Press | Weighted Crunches | 5 | 2 sets + warmup |
| Lateral Raises | Hyperextensions | 15 | 2-3 sets |
| Close grip Bench | | 15 | 2-3 sets |

Clearly you would change this one to suit your purposes, and you'll notice that volume

is significantly higher, so you have to be very mindful to get sufficient sleep and enough calories each day when doing a routine such as this. Also, it is for advanced trainees only. Something this intensive will likely be more than a beginner is conditioned to handle, which compromises gains in the long run. Even intermediates would be advised to stick to alternating routines for at least a while before incorporating more advanced techniques.

Specialization cycles are another important thing to cover here. For trainees who are more advanced, it may at some point become necessary to address imbalances in physique. Everyone has different strengths and weaknesses from a genetic standpoint. In my case, I have good genetics for leg and back growth but my pecs and triceps are much harder to encourage growth out of. In order to correct this, I manipulate volume in order to focus on the problem areas.

First off, maintaining size in an area is much easier than getting that muscle to grow. So for a specialization cycle where I want to focus on pecs and triceps while simply maintaining legs and back, I would need only the bare minimum volume for legs and back. Why not eliminate them completely? Well, you don't want to lose ground in those areas, it is a much better idea to instead add in just enough volume to maintain them. We can then add more volume to the trouble areas, ending up with the same total volume for the whole body as we would get running a standard cycle.

Here is the example:

| | |
|---|---|
| Squat | 1 set + warmup |
| Flat Bench | 3 sets + warmup |
| Weighted Dips | 3 sets + warmup |
| Weighted Chins | 1 set |
| Military Press | 2 sets + warmup |
| Close Grip Bench | 3 sets + warmup |
| BB Curl | 1 set |
| Tricep Extensions | 2 sets |

As you can see, the total number of sets is about the same as a regular HST setup, but we have only one working set for legs, one for back and much more for chest and triceps. Now this is just an example. For a real specialization cycle, I would add in metabolic work as well, although only for the focus muscle groups.

More like this:

| | Reps | Sets |
|---|---|---|
| Squat | 5 | 1 set + warmup |
| Flat Bench | 5 | 5 sets + warmup |
| Seated Dips | 15 | 2-3 sets |
| Weighted Chins | 5 | 1 set |
| Military Press | 5 | 2 sets + warmup |
| Close Grip Bench | 5 | 3 sets + warmup |
| Tricep Extensions | 15 | 2-3 sets |
| BB Curl | 5 | 1 set |

Clearly this is something that a more advanced trainee would have to personalize for themselves, which is why I'm not providing an out of the box routine for this portion. There are too many different combinations of specialization cycles one might need to run in order to correct imbalances. Just keep in mind that you need to actually be at the point where there really are imbalances to address before you should worry about specialization.

# CHAPTER FIVE
EATING FOR SIZE

Most often when someone claims that HST did nothing for them, they gained no muscle, no strength, it eventually comes out that they gained no weight during the cycle. To those in the know, it is immediately apparent what the problem is. How does one expect gain muscle without gaining weight? And you cannot just miraculously gain weight through exercise alone. You have to eat for size if you want to grow larger.

Some very intelligent people over the years have somehow not realized this simple fact. They may be knowledgeable about science or other fields of study, but when it comes to building muscle, they suddenly expect the human body to violate the laws of physics by creating matter and energy out of nothing. But as we all know, matter and energy cannot be created or destroyed, only changed. So to add mass to the body, you clearly need something to build that mass out of. It's really not that complicated once you understand the basics.

First of all, the weight of a human body will never change if the calories you are taking in are not either greater or less than the amount of calories you are burning each day. So if you want to grow, you need to be taking in more calories than your body burns each day. Every organ in the body requires calories to operate, so that takes up a big chunk of your daily calorie requirements. Then there is maintenance of body mass, such as body fat, muscle, etc. This is why basal metabolic rate is based on how much you weigh. There are a lot of ways to figure out how many calories your body burns each day and we will cover a couple ways of figuring this out shortly.

Does this mean that if you want to gain weight, you should just start shoveling food down all day long? Well, that would certainly allow you to gain weight for sure. However, you would likely gain a lot of fat along with whatever muscle you gained. The thing to remember is that you are almost never going to gain 100% muscle. The body doesn't really like muscle that much. Muscle requires more energy to build and maintain than fat and you cannot store a lot of calories in it. For the purposes of the human body, it would much rather store those calories for later in body fat

Essentially, any weight you gain, even if you have the perfect routine, is always going

to be partially fat if you are training as a natural without any chemical assistance. We minimize this fat gain by figuring out how much we need to grow and consuming only that amount, not going crazy with the bulking. Invariably, when someone says they only got fat on HST, it comes to light that they were not counting calories and were eating haphazardly instead of bulking up responsibly. Don't do that. Unless you want to gain unnecessary fat.

It is worth noting that muscle is composed of protein, not fat. You cannot convert your body fat into muscle. In some rare instances, such as total newbies or obese individuals, it is possible to gain some muscle while losing body fat when these people first start weight lifting, but this is not body fat turning into muscle. It is simultaneous loss of fat and building of muscle, and it is not a common occurrence so for our purposes, it is best to simply assume it will not happen to you.

Now, since the muscles are composed of protein, it is pretty clear that you need an adequate intake of protein in order to build more muscle. Your body is constantly building protein and breaking it down. The goal of lifting weights is to increase protein synthesis to a higher rate than protein breakdown and the goal of eating for size is to then provide adequate protein and calories to fuel that protein synthesis. Bryan wrote an entire article about this years ago on the HST site but rather than simply refer you to that article, we will cover the basics of eating for size right here.

One simple and quick way to figure out your basal metabolic rate (or BMR) is to take your weight in pounds and multiply it by 11 or 12. For women, you want to stick to 11 as women generally have a lower metabolism than men. To convert your weight from kilograms to pounds, simply multiply by 2.2.

Example: 100 kg x 2.2 = 220 lbs 220 x 12 = 2640 (BMR)

So an average 220 lb lifter likely needs about 2640 calories to maintain body weight But what about gaining weight? For weight gain, instead of using 11 or 12, multiply by 16.

Example: 220 lbs x 16 = 3520 (calories needed to gain weight)

It may not be immediately obvious, but as you increase in weight, your calorie requirements will go up. So as you grow, it is a good idea to re-figure your calorie requirements periodically or else growth will eventually slow and then stall.

Another formula which is perhaps more accurate is the following: Weight (in kilograms) x 24 hours = BMR. So our 100 kg lifter will have a BMR of 2400 calories. But because our BMR does not take into account how active an individual is, we must adjust.

Here are the activity factors:

Very active: 1.4 – 1.5 this would be someone who performs daily intense exercise or works a very intensive job, such as construction

Active: 1.3 – 1.4 for individuals who exercise and work on their feet most of the day

Light Active: 1.1 – 1.2 exercise three times a week with a desk job or staying home most of the day

Sedentary: 1.0 no exercise and a desk job or staying home most of the day

Our 100 kg lifter who works on his feet all day and lifts 3-4 times a week picks 1.3 as his activity factor. 2400 x 1.3 = 3120 calories a day to maintain his weight. Now, the final step is to add 500 – 600 calories to that total in order to figure out how much you need to eat to gain weight, so our 100 kg lifter will need 3620 – 3720 calories a day to grow. Yes, it is very similar to the number we got using the first formula.

I mentioned the importance of adequate protein intake earlier, but how much is adequate? Well, first let us discuss all the macro nutrients. For those new to managing diet, there are four macro nutrients but only three of them are really relevant here. The four are fat, carbs, protein and alcohol. You should probably not be figuring alcohol into your diet.

Fat is by far the most calorie dense macro, providing 9 calories per gram. Carbs and protein are roughly equal, both supplying 4 calories per gram. Regardless of calorie content, every macro nutrient is important to your diet and you will need an appropriate intake of each in order to gain consistently. We won't be figuring the caloric impact of alcohol into our diet.

Protein provides the building blocks for building new muscle. If you are not already aware of this, proteins and amino acids, which make up proteins, are the drivers behind every single process in the body. Every gene in actuality just codes for a particular protein and that protein causes something to happen in the body. It stands to reason that in the course of lifting, you will be turning over more protein than someone who does not exercise, and since your body already needs some protein for it's daily processes, you will need a higher intake on top of that to maintain those processes while also building muscle.

A general rule of thumb is that you should get about 1 gram of protein per pound of body weight, or 2.2 grams per kilogram of body weight. So our 100 kg lifter will be getting 220 grams of protein a day, or 880 calories worth of protein. So subtracting his protein intake from his calorie goal of 3620, he will still have 2740 more calories to consume each day, and the only other place to get them is from fats and carbohydrates. You can experiment with higher protein intakes but be advised that there isn't really anything magical about super-high protein intake.

Fats are important for various reasons and for aiding in joint health. Fats have many other functions in the body aside from simply storing calories. Adequate fat intake is probably not an issue at this point for most coming into this program. Typically what happens is that most people coming into a program like this actually have to drop fat intake considerably in order to increase their carb and protein intake. This is due to the typical “western diet” which is fairly heavy in fats. The challenge will be in getting adequate amounts of the correct fats.

What is a proper fat intake and what should it be composed of? Too high is not as good for you as you will likely be getting more saturated and other less ideal fats. Too low and you may not be getting enough of the essential fats. Essential fats means those that can

only be obtained from diet, our bodies cannot make them on it's own. A general rule for fat intake is 20-25%. For our 100 kg guy, 20% equals 724 calories. Since there are 9 calories per gram of fat, that comes out to about 80.5 grams of fat. Ideally, you would want to get those fat calories from unsaturated sources and from fish oils. Flax oil is an acceptable fat source but since the fats in flax have to be converted the CLA in flax to EPA and DHA, both of which are already present in fish oils, the superior choice is obvious. A small amount of saturated fat is fine but don't go overboard with it. Instead of cooking with butter, use olive oil or canola oil, things like that.

Carbohydrates, on the other hand, are your main source of energy and without them you will not be able to gain significant strength or have enough energy for productive workouts. Excess carbs alone will not make you fat, as you already know, it is excess calories that will do that. You cannot get fat by eating carbs unless you have an excess of calories beyond the amount of calories needed to maintain your current weight. It is not possible. You will notice in the diet outline below that carb intake is actually pretty high, possibly much higher than you are accustomed to consuming. That is for a reason. While muscle is composed primarily of protein, carbohydrates still play a critical role in the muscle building process.

So after all the protein and fat, we are left with 2016 calories that our 100 kg must consume. The only macro left is carbohydrates. At 4 calories per gram, that is 504 grams of carbs per day to consume. That may seem like a lot of carbs to take in but keep in mind that a decent chunk of those should be taken in prior, during or after training. Whatever is not consumed around training should ideally be mostly complex carbs. I recommend roughly 100-150 grams of carbs centered around the workout and the rest consumed throughout the day, which for this guy would be 350 grams of carbs he will need to eat throughout his meals during the day.

Next to discuss is nutrition around workouts. Personally, I like to get around 50 grams of protein with another 50 grams of carbs (and no fat) prior to training, then I consume another 100 grams or carbs during the workout to keep energy levels high. In my experience,

sipping a carb drink during the workout keeps strength levels and every higher, especially for those who lift earlier in the day. After the workout, I consume another 50-100 grams of protein without carbs. If you did not consume carbs during the workout, you will want to get some post-workout. Again, I would try to keep the protein fat free after the workout.

You don't need a ton of calories during the day leading up to the workout as protein synthesis will likely be at baseline levels prior to the workout, so excessive calorie intake prior to the workout risks some degree of extra fat gain. Keeping the majority of calories in the post-workout time frame is smarter from a fat management standpoint. This doesn't mean starve yourself all day until the workout, just don't go crazy packing in the calories all morning when you don't lift until 5 pm and haven't lifted in 48 hours, as protein synthesis will be at baseline and excess calories at this point risk excess fat gain.

What about your off days? Keep in mind that studies show protein synthesis to spike 24 hours after a workout and return to baseline at roughly 36 hours after the workout. If you lift at 5 pm on Monday and don't eat enough on Tuesday, you are compromising gains. Time and again, there are guys eating big on workout day and eating small on the off day.

Someone eating big all day Monday, lifting at 5 pm, then restricting calories on Tuesday is actually doing it totally backwards. If he was really that scared to gain excess fat, he would be much better off restricting calories all day Monday until his workout, then eating big the rest of Monday night and all through Tuesday until 5 pm comes around.

However, one who is terrified of fat gain is going to compromise their gains in most cases when they try to restrict calories in order to prevent fat gain. Fat gain can always be cut back later. As long as you are responsible with your diet, counting calories, tracking your diet, there is no reason for you to gain excessive fat. Realistically, one should only be aiming for 1-2 lbs of average weight gain per week, or roughly 1 kilogram. Obviously weight gain will fluctuate depending on hydration, sodium levels, etc, but if you take your average weekly weight gain and figure it over time, it should not be exceeding 2 lbs a week and should not be less than 1 lb a week. You can also check your waist measurement, as long as it is not

expanding quickly, then you shouldn't worry too much. For the more OCD folks, skin fold calipers are a good way to keep track of fat gains. Avoid the scales that claim to measure bodyfat or even those handheld bodyfat measurement devices as they are notoriously inaccurate for people who lift weights.

You will notice over the course of time that there are always different fads in dieting. A long time back, fats were evil. Then carbs were the devil responsible for America's obesity crisis. At one point eggs were terrible, then suddenly eggs were good for you again. Saturated and trans fats are going to kill you, except then we find that some degree of saturated fat is necessary... It is always the same story, just a different villain. You have to learn to ignore what mainstream tells you about diet and nutrition because typically they are ill informed on the latest research. Rest assured, while you are definitely going to be steadily gaining a small layer of fat over the course of this program, as long as you count your calories and stick to the diet, you will not gain massive amounts of fat in a short period regardless of how much gluten is in your diet, whether your carbs are high GI or low GI or anything like that.

How to track calories? There are plenty of free sites for tracking your calories. My favorite is http://www.myfitnesspal.com. This site makes tracking calories easy with it's extensive database of foods. Entering in your calories only takes maybe a total of 10 minutes a day and helps ensure you are getting the correct amount of calories and macros. Don't get too hung up on being exact. Our 100 kg lifter above needs 3620 – 3720 calories a day to grow. It is unlikely he will hit 3620 exactly each day. Allow yourself a small margin of error. For him, the ideal range is 3620 – 3720, so I would recommend that he just keep his intake in that range each day. Same thing with your macros. Just try to stay within 5-10 grams of your target. Don't get all upset if you got 83 grams of fat instead of only 80. Allow yourself one day a week to just eat whatever and not track your calories if that helps you stick with the diet.

For those who especially struggle with trying to actually gain weight, here is a simple recipe for a protein shake that will virtually guarantee weight gain, as long as you are getting adequate calories throughout the rest of the day. This is nothing ground breaking, as it is a trick that has been used by many over the years. However, this was a game changer for me

back when I was 140 lbs. I have a higher metabolism than normal and in addition I also have a very high activity level which includes a career that has always kept me on my feet all day long. So for me to bulk up, I really have to pack in the calories. When I was first starting out and could not handle a lot of calories, this shake really helped me out:

Weight Gainer Protein Shake Recipe:

2-3 cups of whole or 2 % milk
6 scoops of whey isolate
¼ cup of olive oil

You can also add in a couple table spoons of peanut butter, a handful of fruit or oats if you want. I never did, simply consumed it exactly as above. You will need a blender in order to mix this and it will be thick. Depending on how exactly you make it, it ends up roughly around 1000 calories and with 150 – 200 grams of protein. I typically consumed it prior to bedtime on workout days. The olive oil gives it a slightly funky taste but it's not too bad and you get used to it. Could be worse, you could be drinking tuna shakes. A tuna shake is a couple cans of tuna blended into apple juice. It tastes just as bad as you are probably imagining. And no, it is not a magic shake that will pack mass on to you. It is tuna floating in apple juice. You are better off drinking my shake instead. At least it tastes better.

Tricks like this shake are useful for those who are not accustomed to eating a lot of food, after all, it can be a struggle to get it all in. I've been there and I know how hard it is. Don't despair. Stick with the diet and over time, your body will adjust and it will get easier to take in more calories. I used to struggle to eat any meals larger than 1000 calories back when I was 140 lbs. There were many nights here I was so stuffed that I had to just lay in bed and try not to puke. Sometimes I did puke simply from eating too much, and of course then I was devastated about all those wasted calories getting flushed down the toilet. But now I can wolf down 3000 calorie meal that has a good macro nutrient breakdown all in one sitting. Like I said, stick with it, it will get easier.

Now that you know how to figure out how many calories you need to gain weight, make sure you track your weight accurately. The best time to weigh yourself is in the morning after you've used the bathroom. Always weigh yourself at the same time each day. Rather than get hung up on daily weight fluctuations, figure your average weight for the week on Sunday. Remember, you want to have an average of 1 to 2 lbs gained a week. Some weeks may be a bit more, some a bit less. This is for a variety of reasons. It could be you ate a sodium heavy meal yesterday or maybe you have not been getting enough water. Maybe you sweated a lot more yesterday than usual, or you ate a lot more starchy carbs than normal and are bloated. Even a night where you drink a few beers can cause a drop in water weight the next day. Don't get too upset if you are not gaining exactly 2 lbs a week. Just look for an average increase.

For those slightly less OCD, it is not necessary to actually weigh yourself every single day. You could just do it at the same time every Monday. You would still want to make sure you do it in the morning just after waking and after going to the bathroom. I don't recommend getting all into taking measurements of every body part each week as it is really tough to judge muscle growth from week to week. You are much better off doing body part measurements at the beginning and end of a cycle instead. And realize that you will likely only be gaining less than an inch on each per cycle. That's normal and fine. We aren't looking for massive gains within the context of one cycle. We are looking for consistent growth over time. That is what sets HST apart from other programs. When you are getting adequate nutrition, HST will keep you growing consistently over time whereas other programs that do not follow all the principles typically quit delivering results after a period of time.

For those who are especially concerned about fat gain, you can also purchase skin fold calipers and take caliper measurements from cycle to cycle to see where your fat gain is. Remember though, a typical cycle is 6-8 weeks. If you gained 2 lbs a week during that time, that's 12 – 16 lbs gained over the course of a cycle. Even if you gained a 50/50 ratio of fat to muscle, that is not going to raise your body fat percentage significantly, as the added muscle mass will somewhat offset the added fat mass. This is important as people doing HST (and lifting in general) tend to freak out when they think they've gained a little bit of fat and when

they look in the mirror, the fat gain is suddenly exaggerated in their heads to where they think they've suddenly become morbidly obese in just weeks. Many a good bulking cycle has been sabotaged by someone who let feelings get in the way of their progress when in reality, they hadn't really gained much fat at all. So keep this in mind.

What about supplements? Keep in mind that most supplements are designed for one purpose and one purpose only: to separate you from your money. All the really effective “supplements” are outlawed in most first world countries. However, there is one legal supplement that has years of research behind it demonstrating it's efficacy and safety. That supplement is creatine monohydrate. It is one of the cheapest supplements on the market, as long as you don't shell out extra money for fancy versions that don't work any better (or are less effective in some cases) as plain old monohydrate. Five grams a day, preferably taken prior to your workout and first thing in the morning on non-workout days can give you an extra boost during your bulks. There is no need to cycle creatine. Many studies have been done on year round continuous usage of creatine and found that there were no ill effects. Aside from creatine, a good multivitamin will help. I also recommend people to supplement with zinc, magnesium and potassium.

Now, an example meal plan for our 100 kg lifter.

| | |
|---|---|
| Breakfast: | Omelet (6 large egg whites, 2 whole large eggs, 2 slices of fat free american cheese) plus two pieces of whole wheat toast and 4 ounces of fat free greek yogurt. |
| Calories: | 506 |
| Carbs: | 35 grams |
| Fat: | 12 grams |
| Protein: | 62 grams |
| | |
| Pre-workout: | 1 scoop of whey isolate in 1 cup of skim milk |
| Calories: | 189 |
| Carbs: | 13 grams |

| | |
|---|---|
| Fat: | 0 grams |
| Protein: | 34 grams |
| | |
| Intra-workout: | 2 scoops gatorade powder mixed in 32 ounces ice cold water |
| Calories: | 480 |
| Carbs: | 120 grams |
| Fat: | 0 grams |
| Protein: | 0 grams |
| | |
| Post-workout: | 1 scoop of whey isolate in 1 cup of skim milk |
| Calories: | 189 |
| Carbs: | 13 grams |
| Fat: | 0 grams |
| Protein: | 34 grams |
| Lunch: | 1.5 cups of pasta tossed with 3 tbsp olive oil, 2 pieces of wheat bread with butter, 2 cups of skim milk, six fish oil caps |
| Calories: | 1035 |
| Carbs: | 112 grams |
| Fat: | 51 grams |
| Protein: | 32 grams |
| | |
| Snack: | 1.5 cups oatmeal, 3 tbsp of honey |
| Calories: | 413 |
| Carbs: | 90 grams |
| Fat: | 4 grams |
| Protein: | 9 grams |
| | |
| Dinner: | 8 oz sirloin steak, 1 baked potato with butter and sour cream, 1 cup of broccoli |
| Calories: | 801 calories |
| Carbs: | 78 grams |

| | |
|---|---|
| Fat: | 16 grams |
| Protein: | 71 grams |

| | |
|---|---|
| Totals calories: | 3682 |
| Carbs: | 470 grams |
| Fat: | 87 grams |
| Protein: | 243 grams |

Obviously the calories will vary depending on the exact portions you use and due to variations among food suppliers. As you can see, our lifter exceeded his protein goal of 220 grams slightly and was under on carbs by 30 grams as well as 3 grams under on fat. As I discussed earlier, this is not a big deal and is not the end of the world. Your macro-nutrient goals are guidelines. As long as you are getting very close to them, variations from day to day are fine.

But what about six meals a day to keep the metabolic fires stoked? First of all, I don't know what “metabolic fires” are and I'm reasonably certain that there is no fire inside of the human body. Secondly, there are studies upon studies showing that meal frequency has no effect on metabolism. Even if it did, why would you want to *increase* metabolism when you are trying to gain weight? That makes no sense. You would then have to eat even more food in order to gain weight.

In reality, the correct number of meals a day would be however many meals it takes you to hit your calorie goals. When bulking up, this can increase to several meals a day. When you are dieting down, you may only be eating two or three meals a day. I don't want you to worry about irrelevant things such as meal timing, meal frequency or anything along those lines. The only meal timings that I want you concerned with is the shakes around your workout and the carb drink during your workout.

But what about catabolism while I sleep?! All my muscles are disappearing because I am fasting while I sleep! Actually, that's not true. Food does not digest instantly. Most

especially while bulking, but even when eating normally, you will be digesting food all night long while you sleep. Your stomach is not empty when you wake, thus there is no catabolism while you sleep. Your muscles are not wasting away.

Last thing here, if you do opt to use the site I linked to a few pages back for tracking calories, you can easily track your weight there as well. This is especially convenient as it will allow you to set goals, track progress over time and see at a glance how you are doing with regards to weight gain.

That concludes eating for size. And now that we've gotten all that out of the way and you know how to bulk up, we need to talk about dieting back down...

# CHAPTER SIX
HST AND CUTTING

At some point during your adventures in gaining weight, you will come to the point where you have started to get fat. If you didn't start out too fat and you managed your calories right, you should be able to bulk for at least four to six months before it becomes necessary to cut. Ideally, for most bodybuilders, once you get around 15% body fat is when you want to end your bulk and start cutting.

Can you bulk indefinitely? Sure, if you aren't concerned with fat gain then go ahead and keep bulking indefinitely. You will get huge for sure, but you will also have an ever increasing layer of fat that will grow and grow. For those of us who prefer to stay leaner, it will eventually become necessary to end our bulk and switch to a diet to trim away the extra fat we've gained while we were focusing on building muscle. I will note that there is nothing really wrong with bulking up to 18-20% bodyfat if your cholesterol, blood pressure, etc are all still good. Remember that 15% bodyfat is considered ideal for males, so going as high as 20% really isn't that big of a deal and should not have a huge negative impact on your health unless you have some sort of genetic disposition for bad cholesterol or make poor food choices during your bulk.

Remember, weight gain and loss are a function of diet, not training. Yes, you can increase the amount of calories you burn by doing more training but this is a very slow method of losing body fat The most effect way to lose body fat is to create a calorie deficit through diet. Any hypo-caloric diet is going to cause weight loss but for the majority of trainees, it is best to keep weight loss to an average of 1-2 lbs a week (or about 1 kilogram.)

You can figure your required calorie intake using the formulas outlined in the previous chapter. However, instead of adding 500-600 calories over your BMR, you want to subtract that amount from your BMR. So our 100 kg lifter who's BMR was 3120 calories a day would need to limit his calories to only about 2520-2620 a day in order to consistently lose weight. And just as with bulking, you want to re-figure this number as you lose weight, as you will have to consume fewer calories as you lose more weight.

Obviously you want to keep protein high. I actually prefer to jack protein up more

during a cut than I do during a bulk. I prefer 1.5 grams per lb of body weight, or 3.3 grams per kg of body weight In general, getting more calories from protein helps retain more lean mass than getting less protein. Further, there the thermic effect from higher protein intake. Protein takes a bit more energy to digest than carbs or fats to the point that some people have suggested that we should consider protein to have slightly less than 4 calories per gram, but I would strongly recommend that you don't worry about that bit and just keep counting it as 4 calories per gram. Protein makes you feel fuller and helps blunt hunger as well. However, for those who have a tough time getting in more protein, 1 gram per lb of body weight is still fine as well. The overall moral here is that on a cut, more protein is generally better.

As for fats and carbs, it really depends on which approach works best for you, meaning which one can you stick to better. Some people do better on lower carbs with high protein and moderate fat. Others do better keeping carbs higher and keeping fat lower. Keep in mind that success in a diet can also depend on what sort of carbs or fats you are taking in. A spoon full of sugar won't keep you feeling full for long whereas a cup of broccoli will occupy more space in your stomach than an equivalent amount of sugars.

For our 100 kg lifter, he will be getting 330 grams of protein a day, which is 1320 calories. This leaves around 1200-1300 calories left for him to consume. If he opts to keep fat at 25% of his calorie intake, that is 630 calories or 70 grams of fat. This leaves him with roughly 140 grams of carbs to eat each day. Or if he opted to go a lower carb route, keeping carbs at a maximum of 100 grams a day, then he would have to increase his fat intake to about 100 grams a day. Either way will result in about the same amount of fat loss, so the deciding factor here is adherence. Higher carbs may allow him to feel fuller throughout the day and be less likely to binge. Some people find they have more blood sugar fluctuations on higher carbs during a cut, and so choose lower carbs.

Of course there are other options as well, such as carb cycling. If our lifter decided to carb cycle, he may decide to eat 140 grams of carbs and 70 grams of fat on workout days to keep energy high for lifting and then reduce carbs to 100 grams and increase fat to 100 grams on his off days. Or he may even drive carbs even lower on off days and slightly higher

on workout days. All these are possibilities.

There is also nutritional timing, which we talked about in the previous chapter. Generally, you want to focus most of your calories in the 24 hour window after the workout, just like with bulking. So you may keep calorie intake rather minimal throughout the day before your workout, then eat the majority of your calories after your workout. You can see this approach taken to an extreme if you look up “intermittent fasting.”

For those who are still scratching their heads about dieting, there are plenty of good resources online to help you. There are also a lot of poor resources that will tell you crap that isn't exactly accurate about dieting. Lyle McDonald is one diet expert who is widely regarded as a trusted source for information. He has several books that can help one set up an appropriate diet plan. A Guide to Flexible Dieting is a particularly good one. For the more OCD bodybuilders, the Ultimate Diet 2.0 or The Rapid Fat Loss Handbook are both solid choices.

Now we have figured out how to lose weight, which is all well and good. But how do we ensure that at least the majority of that weight lost is body fat? The answer is training using HST. You can use HST with no modifications and it will do a decent job maintaining lean mass during a cut, however there are some small changes you can make to optimize your training for muscle retention while cutting body fat

First of all, skip the 15s. The lighter weights of the 15s are not as effective as the heavier loads of the 10s and 5s for sparing muscle. In the interests of preventing burnout, it is better to limit yourself to three days of HST a week. Focus on compounds, either eliminating isolations entirely or using only minimal amounts. You also want to draw your cycle out as long as possible. After your 5 RM day, instead of trying to hit new PRs each session afterward, you would instead keep working with your 5 RM and focus on maintaining strength rather than increasing it. It is unlikely you will greatly increase strength while on a calorie deficit. However, if you can maintain strength, then odds are you are not losing appreciable muscle mass, since as we all know, cross sectional area of the muscle fibers (along with

central nervous system coordination) is the main component of strength.

Next key point is to never cut calories during an SD. Either skip the SD entirely and just start back at the beginning of your 10s, or else go to maintenance calories during SD and use that as a refeed period to reset your metabolism. Most individuals will not need to reset their metabolism after every 6-8 week HST cycle. However, the leaner you are, the more often you will need to either perform a refeed or take a break from dieting. For those who might be coming to HST in the process of cutting and have already been dieting for quite some time, it is a good idea to take an SD and eat at maintenance during that SD just to be sure that you get everything back to normal before you jump in to an HST cutting cycle.

But wait, did I say to go back to the beginning of the 10s in lieu of an SD? Isn't that against HST principles? Well, not really. The point of going back to the beginning of the 10s is to give yourself a bit of a rest from the heavy weights so you don't burn out. If you are getting tired of the heavy loads of your 5 RM but you aren't getting burned out and your metabolism isn't tanked, then there is no reason to take an SD. Yes, you will be using loads that are probably not going to be effective for growth but your muscles do not require as much stimuli to maintain themselves as they do to grow. Maintenance is the key during a cut, not trying to somehow be the one in a million person who manages to grow muscle on a cut. You are not going to grow muscle while on a calorie deficit. Simple physics – the body requires matter and energy to build new mass. It isn't going to happen. Many people have tried over the years, thinking that somehow they will do what nobody else has managed to do. Forget about it. Cutting is about maintaining as much muscle as possible while you shed the fat so that you can see all the muscle you worked so hard to build during your bulk.

Aside from burn out, the biggest problem I encounter with lifters is the psyche out factor. They start their cut and after a month or so, they see themselves shrinking in the mirror and flip out, fearing that they are losing all their hard earned muscle. Sometimes they take the worst possible action and switch their cut immediately to a bulk. With a slowed metabolism from a long period of lowered calories, a sudden increase in uptake can result in unnecessary fat gain, making their situation even worse. Focus on the numbers and not on

the mirror. You must realize that you do not have the most realistic view of your own body. However, unlike the mirror, the numbers tend not to lie.

It is normal for muscles to become a bit deflated during a cut, especially if you are restricting carb intake. This is why I stressed that you should use strength maintenance as your guide stick for whether you are losing muscle. If you have been consistently squatting the whole time you were bulking, continued squatting while cutting and are able to maintain your strength, it's unlikely that you have lost significant muscle mass in your legs. If the squat was a new lift that you just started doing during your cut, you will make immediate strength gains due to increased neural coordination, so for obvious reasons, you should use lifts for your cutting routine that you have already been doing.

So let us assume that our 100 kg lifter has been following the intermediate alternating HST routine outlined earlier. How will he modify this for a cut?

Here is the routine he was following during his bulk:

| A Routine | B Routine | # of Sets |
|---|---|---|
| Squat | Deadlift | 2 sets + warmup |
| Romanian Deadlift | Leg Curl | 1 set |
| Standing Calf Raises | Seated Calf Raise | 2 sets + warmup |
| Flat Bench | Weighted Dips | 2 sets + warmup |
| Bent over Rows | Weighted Chins | 2 set + warmup |
| Military Press | Military Press | 2 sets + warmup |
| BB Curl | DB Curls | 1 set |
| Close grip Bench | Tricep Extensions | 2 sets |

Weighted dips and chins are not ideal since body weight will be dropping, so the load will be dropping as well the lighter our lifter gets. He also drops the arm work so that he can instead focus on maintaining strength in the bigger lifts. This leaves him with only seven exercises, so he decides to stick to just one workout rather than alternating. There is little point in alternating only seven exercises, so he opts to just drop deadlifts entirely and keep

squats in his routine as his primary mover for legs.

Here is what he decides on:

| A Routine | # of Sets |
|---|---|
| Squat | 2 sets + warmup |
| Romanian Deadlift | 2 sets + warmup |
| Standing Calf Raises | 2 sets + warmup |
| Flat Bench | 2 sets + warmup |
| Bent over Rows | 2 set + warmup |
| Military Press | 2 sets + warmup |

Six simple exercises that he can focus on during his cut. Volume is slightly lower than the routine he used while bulking but this is fine. Remember, the focus is maintenance, not growth, and that requires less volume. This is a solid cutting routine, all lifts that he is familiar with, so he can clearly gauge whether he is losing strength in any of the lifts over the course of the cycle.

What about cardio? Cardio is simply a means of increasing your calorie deficit each day. There is nothing really magical about it and it isn't necessarily needed during a cut. I personally have cut down a dozen times over the years and only a couple of those cuts did I do regular cardio. Not doing cardio never hurt my fat loss. All that said, it can help speed fat loss, especially in smaller individuals who are not able to consume as much during a cut as larger individuals. Obviously our 100 kg male is able to eat considerably more 65 kg female who is trying to lose fat. For smaller individuals, it becomes more difficult to create a sufficient deficit through diet alone and in these instances, cardio is probably a necessity.

The type of cardio you choose to do is not really that important as long as it is something you can maintain over time. Be mindful that especially rough cardio, such as running long distances, will stress the related muscles and likely cause a subsequent drop in strength with the dependent lifts. If you are running a lot during your cut, don't be surprised if your squats go down. This does not mean you are wasting away if you are able to maintain

strength in your upper body lifts. It just means you are beating the crap out of your legs five days a week.

Cardio options include steady state cardio done for longer periods of time (30-45 minutes) or HIIT style interval training done over a shorter period of time. You can do it on a treadmill, elliptical, exercise bike, stair master or even a rowing machine. It is really just up to what works best for you. Do keep in mind that when a treadmill tells you that you burned 1000 calories during a session, that is probably not entirely accurate. You can get a more accurate estimate of calories burned through various watches or other devices that strap to your body. Some of these can track heart rate, etc over time and even interface with your PC so you can compile this data at home and see how you are doing. Obviously basing your cardio on your actual heart rate is more effective than simply winging it, but if you don't want to shell out the money for an expensive heart monitor watch, then fear not. You won't somehow regain fat if you don't stay in the optimal heart rate range for fat burning or anything like that. Just doing the cardio is the important part.

I would suggest as a baseline to do cardio twice a week on the days you are not lifting. If you lift Monday, Wednesday and Friday, then do cardio on Tuesday and Thursday. Doing cardio on an empty stomach really isn't necessary, especially since in this example, protein synthesis will be elevated Tuesday and Thursday from your Monday and Wednesday workouts. Rather than do it on an empty stomach, try taking in a bit of protein only prior to the cardio session. Cardio in the morning is a bit more productive for fat loss than later in the day, but if you can only do it later in the day, then just do it later in the day.

It isn't really recommended to do cardio and lifting on the same day, but if you simply must do them on the same day, it would be preferable to do the lifting in the morning while you are fresh and the cardio in the afternoon or evening so that it does not compromise the lifting. Remember that lifting is the priority since it is what helps you keep all your hard earned muscle. Doing them on the same day may not be ideal but it is alright if that is what you have to do. As before, the important thing is actually getting it done. We've all got jobs and thus we have schedules to work around, unless you are independently wealthy or

something. So just make it work somehow. Just like with building muscle in HST, cutting in HST is all about consistency. Getting it done each day, every week, until you reach your goal.

How do you know when you are done cutting? Furthermore, when to cut and when to bulk? These are valid questions but there is no real concrete answer. It will depend on the individual. Is having abs year round important to you? If so, then bulk up to 12% body fat, when you hit 12% then you know it's time to start cutting. And when you cut, stop cutting at 8%. For most individuals, a range more like 10% to 15% is better. This keeps you from being what normal people would consider fat and gives you plenty of time to grow.

However, bulking higher than 15% body fat is another option for those brave enough and disciplined enough not to let their bulk become permanent and allow themselves to become morbidly obese. I've bulked to roughly 20% body fat twice during my career and both times made the best gains ever. Does this mean it would work for you? Not necessarily, as it takes just as much discipline as it takes to do a proper cut. And the major drawback to bulking beyond 15% is that it means that you will be cutting for longer before you get back down to 10% body fat You could instead only cut down to the 12-15% range and then bulk back up to 20%. For most bodybuilder types who prefer to see at least a little abdominal definition, my recommendation would be to stick to 10% body fat as the bottom of your range and 15% as the top of your range, just as a general rule of thumb. Bulking beyond 15% is only for those who do not care about fat gain or those disciplined enough to go that far without becoming permanently fat.

So it really comes down to your goals. As long as you count calories while bulking AND cutting to manage fat gain during your bulks and muscle loss during your cuts, it doesn't really matter which range you choose. Either option gives you plenty of time to grow. Just because you are currently in a bulk doesn't mean you can quit counting calories and just eat whatever. That is how people end up getting too fat, too fast. And when you are cutting, a massive, severe deficit and too much cardio will lead to excessive muscle loss, basically making your whole bulk prior that cut a complete waste of time.

One thing I will strongly urge you to remember is to always include a week, preferably two weeks at maintenance calories between cutting and bulking. If you just finished bulking, maintain for a couple weeks before you start cutting. If you've been cutting for a few months, maintain for two weeks to normalize your metabolism before you jump back into another bulk. This is a critical component as both cutting and bulking have different effects on all the hormones in your body, so jumping back and forth between cutting and bulking is never a good idea. You also need to change your mental state. Appetite has a highly psychological element to it and shifting from a bulk straight to a cut will have you feeling like you are starving yourself all day long. Conversely, trying to bulk immediately after a cut will lead you to feeling like you are overly stuffed all day and most likely unable to fit in enough food to actually grow much anyway. If you've been cutting or bulking for a long time, just take a break from it all for a week or two and let your body and mind get back to normal before you jump into doing the opposite.

Now how about our 100 kg lifter? What will his diet look like if he was cutting down? Realistically, it can be much the same as it was for bulking, you just eat less of everything. Of course some modifications will have to be made, and this is of course just an example, so don't be surprised if you find that you have to drop some foods entirely or substitute similar proteins with less fats. Whatever you have to do to get to your calorie goals will be fine. There is nothing magic about specific foods. Green tea will not make you get leaner than if you don't drink it, nor will any magic kind of coffee. These things can be great for a stimulant and appetite suppression effect, but they themselves do not cause fat loss.

| | |
|---|---|
| Breakfast: | Omelet (6 large egg whites, 2 whole large eggs, 2 slices of fat free american cheese) and 4 ounces of fat free greek yogurt. |
| Calories: | 366 |
| Carbs: | 9 grams |
| Fat: | 10 grams |
| Protein: | 58 grams |
| | |
| Pre-workout: | 2 scoops of whey isolate in 1 cup of skim milk |

| | |
|---|---|
| Calories: | 291 |
| Carbs: | 13 grams |
| Fat: | 0 grams |
| Protein: | 59 grams |

| | |
|---|---|
| Intra-workout: | 1 scoops gatorade powder mixed in 32 ounces ice cold water |
| Calories: | 240 |
| Carbs: | 600 grams |
| Fat: | 0 grams |
| Protein: | 0 grams |

| | |
|---|---|
| Post-workout: | 2 scoops of whey isolate in 1 cup of skim milk |
| Calories: | 291 |
| Carbs: | 13 grams |
| Fat: | 0 grams |
| Protein: | 59 grams |

| | |
|---|---|
| Lunch: | 1 can of tuna with 1 tbsp of lite miracle whip mixed in, four pieces of wheat bread, 2 cups of skim milk, six fish oil caps |
| Calories: | 697 |
| Carbs: | 83 grams |
| Fat: | 17 grams |
| Protein: | 50 grams |
| Snack: | 1 cup fat free greek yogurt |
| Calories: | 140 |
| Carbs: | 9 grams |
| Fat: | 0 grams |
| Protein: | 23 grams |

| | |
|---|---|
| Dinner: | 8 oz sirloin steak, 1 cup of broccoli, 2 cups skim milk |
| Calories: | 496 calories |

| | |
|---|---|
| Carbs: | 32 grams |
| Fat: | 9 grams |
| Protein: | 66 grams |

| | |
|---|---|
| Totals calories: | 2521 |
| Carbs: | 219 grams |
| Fat: | 37 grams |
| Protein: | 314 grams |

Since this is a workout day for our lifter, he kept the carbs higher and the fats lower. On his off-days, he would replace the intra-workout drink and post-workout shake with a meal that would preferably contain more fats, a decent amount of protein and a few less carbs. But again, as long as you are getting close to your macro-nutrient goals, some variations in day to day will occur and is fine.

Through experience, you will eventually learn which foods will keep you feeling fuller and less hungry throughout the diet. There is no rule saying that you must use the same foods day in and day out. And as I suggested in the previous chapter, give yourself a day every now and then where you don't count calories and eat as you wish (without going out of control and binging like a madman) in order to keep yourself from getting too sick of the diet.

# CHAPTER SEVEN

WRAP UP

My hope in writing this little book is that this information was accessible enough for those of you who read this to understand. I hope you now know how to construct an HST cycle and how to be successful with it. I can't stress enough how important the diet portion of it is. I always tell people that there is no point in running HST to put on size if you aren't going to do the work of eating enough to grow. And it's true. You really are wasting your time. Regardless of what routine you use, if you don't put in the time in the kitchen to nourish your body adequately then nothing will happen.

You cannot build mass from nothing. Physics tells us that neither matter and energy cannot be created or destroyed. You cannot build muscle from thin air, no matter what sort of routine you are doing. Fat cannot turn into muscle. You must feed your body what it needs to grow if you want to become bigger. This key component really is the biggest problem that lifters have with HST and any other routine. Before you complain that you did HST and all that happened was you got fat, you better make sure you are counting your calories and not eating more than you are supposed to. If you say you did HST and you didn't gain any muscle at all, were you even gaining weight at all? If not, then you weren't eating enough.

The other thing I want to stress is that even with a routine like HST, you should not expect magic. It took me eight years to get to where I am today. That's a fourth of my life. It is a huge dedication to do something like this. I see newbies all the time get discouraged because after one cycle, they are not giants suddenly. That's not how it works. Building muscle is all about the long view. If you are a natural trainee, it is going to take at least a good year of solid training AND adequate diet before you will notice major changes in your body. This is assuming nothing happens during that year to throw you off such as injuries, major life changes like a job loss, etc.

I myself had a huge setback when I was 27. At the time, I was feeling great because I was at the tail end of a long bulk and I had finally hit 230 lbs body weight. I was getting fat at the time too, but it was the largest I had ever been. Then my wife and I got a divorce, I temporarily lost my kids for about nine months and I lost 40 lbs. It was like the whole year leading up to that 230 lbs was just gone. But then I got my kids back and I've had them with

me ever since. I got my diet back under control, starting training regularly again and after a year or so went by, I was back up to 230 lbs again only this time I was a little bit leaner, a little bit stronger than when I had been there before.

And that's how it works. You get to your goal weight, you are more muscular but you've got some body fat so you cut down. Next bulk, when you get back to that weight again, you will be a little leaner, a little more muscular. Then after the next bulk, when you get back to that weight, you'll be leaner yet again and even more muscular. It's all about incremental changes to your body. That's why I don't even take measurements but every six months or so now. There is no point. A size change on your arms of a couple centimeters or a little more than half an inch could be water, it could be swollen from recent lifting, it might not be real growth. So I measure less frequently than most, I set long term goals, not goals for each cycle.

I urge everyone reading this to shift their thinking to the long view. When you first run HST, give it at least three or four cycles before you really judge it's effectiveness. As I alluded to in a previous chapter, this is where HST really outshines other routines. After six months of HST compared to six months of a traditional bodybuilder split, that is when the results really start to set it far apart. Take pictures. Lots of pictures. Take pictures at beginning and end of each cycle, try to get them in the same poses in similar lighting. After several months, when you look back at the pictures, you may be really surprised at what you find. Our mind plays tricks on us looking in the mirror but pictures don't lie. Placed side by side, it is much easier to see all the cumulative changes from lifting the HST way.

Don't let little daily interruptions mess up your routine. If you get sick in the middle of the 10s and can't lift for five days, don't abandon your cycle. Just restart the 10s and keep going with it. If you miss your Friday workout, just make up the workout on Saturday, or just take the weekend off and do it on Monday. You can't let anything disrupt your focus. And this leads into my next thought.

Set goals for yourself. You should always have goals for yourself. If you don't have

any concrete goals, then you don't have concrete focus. A cycle without a solid focus is less likely to succeed. I like to set goals for the year with smaller goal posts set quarterly, but you can do shorter time frames than that if you wish. Six month goals are good. Quarterly goals are fine too. The point is to give yourself something to work toward.

For those of you who have been in management in any company, you know how much they love to toss around acronyms. Eventually you quit paying attention to all the acronyms because they are just trying to make you memorize stuff that you already know anyway. But I'm going to give you an acronym for goal setting that will actually help you, one worth memorizing.

When setting goals, I want you all to always remember to be S.M.A.R.T.E.R. What does this mean? Well, let me break it down for you:

Specific - always specify what exactly you are planning to do. Example, rather than say "getting stronger in the squat" you would say "squat 405 lbs."

Measurable - has to be something where you can actually gauge progress. "Get in better shape" is harder to measure than "get down to 10% body fat."

Attainable - you must actually be able to get the goal, or what is the point in setting it? Unattainable goals mean you will lose motivation - why try if you can't get it anyway? If you deadlift 405 now, do not set your goal for 800 lbs, that will take years to attain if you even have the genetics to get to such a level.

Relevant - choose goals that will help you move forward over the course of the year and help you maintain focus on the things that actually matter. I try to keep my goals all to a common theme. If you are trying to get huge, for example, setting a goal to be able to do 100 kipping pullups without stopping probably isn't going to do a lot to move you forward in getting bigger.

Time Bound - Very important! Set time frames for everything. Making a deadline for the

goal puts the pressure on and helps keep you motivated. When you were in college and you were given an assignment due by the end of the semester, when do you think most people completed that assignment? Example - goal is to reach 10% body fat by March 1st.

Enjoyable - Try to make your goal something that will make you feel good about yourself. This should be easy. But think about how great it feels to look in the mirror and see 10% body fat getting closer and closer, your abs becoming more and more visible. That helps keep you driven and hungry for more.

Recognize - Recognize yourself for your accomplishments. When you hit that 405 lb squat, post it on your training log, post it on your facebook - recognition goes a long way to make you feel good about hitting your goals, which in turn makes you more motivated to keep setting and attaining goals.

If you keep these guidelines in mind when you set your goals for the year, I promise you that you will be more successful than if you set bland goals like "I want to get in better shape" or "I need to improve my cardio and/or get stronger" - concrete goals that are intelligently thought out are the key to continued progress throughout the year. Think about this. When December 31st comes around, do you want to look back at the year and feel disappointed that you accomplished nothing, or do you want to be proud of everything you did over the year, all the goals you achieved and the personal records you broke? The choice is yours.

Make sure you post all your goals publicly so that you are accountable for them and like I said, post it for everyone to see when you hit your goals. It's alright to try to get a pat on the back for achieving a goal, and that pat on the back will help you continue hitting your goals all year long. And the biggest, most important thing to remember... when you achieve a goal, set a new one. Continual improvement, that is the key to success. When you hit a goal, move the goal posts. Keep yourself going.

Beyond goal setting, I strongly recommend creating the pre-workout ritual. Make the time leading up to your workout a ritual. Getting your gym clothes on, drinking your pre-

workout shake, packing your gym bag, whatever little things you have to do before you go to the gym – turn it into a ritual. At first it may seem silly or it might not seem like you are doing anything important at all, but after a month or two, you will see. When you have a solid pre-workout ritual, it gets your head into the appropriate mindset. You will find yourself more focused in the gym. On the drive to the gym, you will practically be itching to get in there and start lifting.

Making the whole time around the workout into a ritual instead of a routine helps turn it into a habit and when it is a habit, you are less likely to forget to chug that protein shake a half hour or so prior to your workout. You're less likely to forget to bring your straps with you in your gym bag. You won't be just going through the motions, you will actually feel the need to do each of those things prior to going to the gym. After a few years of this, making sure you get to the gym consistently will be much easier than it was when you first started out.

The very last thing for me to do here is offer thanks: primarily to Bryan Haycock for all the work you've done over years to gather all the information together in one place and to sort through all the studies you had to analyze in order to create HST. I also need to thank you for creating the HST site, writing all the articles that have taught me so much and for building the awesome community of the HST forums (of which I have been a member of for almost a decade.) These forums have supported me and aided me all these years in my pursuit of physical excellence. Both the HST site and the forums have quite literally changed my life. I would not be where I am today if it were not for you and your tireless patience in answering all my questions over the past decade. I truly consider you one of my mentors. Additionally thank you for allowing me a greater purpose among your community where I currently act as a moderator and resident HST expert. I really hope that this book I've written makes you proud and that I have made a worthwhile contribution to HST. It's the least I can do.

Furthermore, I must offer thanks to the others who's knowledge and advice over the years have had an impact on my own development: Dan Moore, Borge Fagerli, Lyle McDonald are the names that come to mind immediately, although there are many others who have helped me over the years, whether directly or indirectly through their writings.

And as I wrap this up, I want to encourage anyone who plans to run an HST cycle to register on the HST forums and post a training log in our training logs section. The HST community is filled with a lot of helpful individuals who will be happy to help you set up your cycle, offer advice throughout your cycle and even give you words of encouragement to help keep you motivated. Further, we can answer any questions you may have left over on the forums. Just register and then ask your question, someone is bound to answer.


You can find the Official HST Forums at http://www.thinkmuscle.com/forum/

The Official site can be found here: http://www.hypertrophy-specific.info/

This book is not officially sanctioned by Bryan Haycock in any way. I do not claim that all the information I present within explicitly represents Bryan's views; what you have read is merely my interpretation based on almost a decade of following HST.