NUTRITION AND WEIGHT MANAGEMENT
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LET'S GET STARTED!

The aim of this type of regimen is to feed exercise-induced inflamed muscle tissue to make it progressively bigger, stronger and with higher levels of endurance... thereby becoming fitter, more efficient and leaner (less body fat).

- Train your muscles progressively harder within the limits and bounds of safety.

- Feed your body the right amount of nutrients so it gets the right balance of 'building blocks' for growth and repair.

- Aim to get it down to a fine art. Build and stay as lean as possible; it's all about the right amount at the right time. Things soon become second nature.

ZERO IN AND ACHIEVE YOUR GOALS

This food plan is all about 'correcting one's life-long conditioning/bad habits' or whatever you might want to call them. It's time to 're-condition' your eating habits. I'm not saying it's going to be easy, but it's not too difficult either.

Nobody is telling you that you must become a machine and you only have one week to get it right or you've failed... far from it! This food plan is long term.

Stride toward your goals. Pick a goal and break it down into realistic steps. By focusing on the short term goals, you won't have such a distant objective in achieving the real end goal.

TODAY'S LIFESTYLE

The body can run on any amount of calories you give it. If you feed it a small amount, it will use it and what it isn't provided with, it will take from somewhere... an incredibly efficient machine. It will scavenge from muscle, fat and even bone density!

This, however, does not mean that it will run and build muscle efficiently having to scavenge around. It just means that the body learns to take what it gets, and gives minimal energy output.

How do you get through your day and perform at work, PLUS get to the gym having the energy to overload your muscles, heart and lungs and the rest, as well as get a growth response to the training, if you aren't switched on 100% about the nutrients that the body needs and runs on?

RUNNING ON EMPTY

- Low self-esteem/confidence

- Low responses and performance for just about everything you do mentally and physically.

- Feeling like the slightest thing can be draining. Let's round it up to **general health**. Are you prone to general 'bug' catching, and how good is your training recovery?

Don't forget that through training, your body has been damaged and has to be fed to respond positively from the effective training you're doing.

NUTRIENT AVAILABILITY IS THE KEY

A lot of people can train hard but when it comes to nutrition, they fall short of the mark. Maybe it's a lack of knowledge, discipline or whatever. It all has to come together or you will only achieve sub-par results at best in the gym. If you have the nutrients constantly flowing into the bloodstream, then there is no shortage of materials to repair inflamed muscle tissue... BINGO!

Quite simply, nutrient availability needs to be nearly constantly available. The idea is to keep the body supplied with just the right amount of fresh, ready to use nutrients to fuel us and build on the foundations that are already there, toward which we are pointing our gym efforts.

If the nutrient availability is up at an optimum level, myriad benefits can be achieved:

- You will optimally begin to repair the damage that you are causing when you train (exercise-induced inflammatory response), feeding the mass building process.

- You will achieve a higher level of well-being when your body is in a positive state and so too your mind will benefit.

- Blood pressure/cholesterol levels will reduce themselves with a healthy balance of overall health, reducing the chances of heart disease, cancer, diabetes etc.

- You will have more energy to achieve more in life, be it professionally or personally.

- Create a professional edge in your work environment. High energy can only be a good thing.

This nutrition plan will only work if you work hard at it. So many people take it on half-heartedly, thinking that if they quickly browse through it, then 'hey presto, that will do'. This is not the case... at the beginning it takes hard work and ongoing progressive effort, but once you've got it, it becomes second nature.

MEAL SCHEDULING

Meal Scheduling
For optimum nutrient availability, aim to eat between five and six meals a day. Six meals a day is what a body builder would target. If you are having problems with this number of meals, four or five meals will suffice... it really comes down to what you can do. More often with shorter gaps in between is always going to be better for your results and your energy.

Example meal timing: **06.30hrs - 09.30hrs - 12noon - 15.00hrs – 17.30hrs – 19.30 hrs.**

PORTION SIZE - ZERO IN!

Portion sizes are, of course, very relevant indeed. There are two ways of doing this and you need to really start listening to the body:

1. Count every gram of every nutrient/calorie counting (I've been there, not fun and not the way).

2. Portion control (a commonsense, easy to follow, SUCCESSFUL approach).

The following text shows how portion sizes should be tackled.

Most people go wrong in the size of the portions of starchy carbohydrates by eating too much at any one serving of pasta, rice, potatoes etc. Make sure you get the amount and the timing spot on and do not overfill your system. The digestive tract has to work hard at digesting a big, bulky meal, so keep it light. Initially, chances are that you won't be hungry in time for your next scheduled meal. Cut back the size of your starch and protein serving by a fifth and zero in on being just hungry enough for your next meal. If it is still not happening, cut again by another fifth and so on and so forth.

How do you do this you ask? Simple. Compare your portion size to your fists, so make a fist (as if you're about to punch a bag) with both hands, and put your two fists together. From your wrist up resembles the size of your stomach, i.e. the amount of food our body ideally requires – any more than this and we're overloading our stomach and digestive system, and it's more likely this extra food will be stored as body fat.

The idea is to size your portions accordingly so it fuels you for just the right amount of time. You should be hungry half an hour before you're ready for your next pit stop. It's good to briefly leave your system empty... it clears the digestive tract and your percentage of fats stored from excess food intake is definitely going to be reduced.

PORTION SIZE - ZERO IN! (CONT.)

So how does your ideal portion size relate to this double fist? Well, if we flatten our hands out and imagine them lying on top of a dinner plate, then our hands (from the wrists up) resemble our 'ideal meal size'.

Now this doesn't mean that we can cover this area with anything we desire. Just as portion control is important, so too is the type of nutrients we're taking in (think carbohydrates, proteins and fats). We've briefly outlined the importance of each of the above, and we know that the ideal balance between the 3 types is dependent on our training. If we are training hard at the gym and stressing our muscles to create the inflammatory response, then not only are our worked muscles crying out for protein for repair and growth, but also for some carbohydrates to refuel them for the next training session.

So back to our double fist, which has been spread out to show the portion size on a dinner plate. If we take our left hand, this will resemble our lean protein serve (see below for ideas on sources of lean protein). And our right hand is our starchy carbohydrate serve on the plate.

If we look at the protein serve, our flat hand is about the size of a fillet of fish, a small chicken breast, or even a lean cut of red meat. We don't want to track numbers here, but for example, a fillet of snapper the size of an average man's hand will have about 20-24 grams of protein.

When we look at the starchy carbohydrate serve, once again it's all relative to the size of our flattened hand on a dinner plate. Whether this is rice, sweet potato, pasta etc, we can now see the portion size we are after! Simple really, no need to weigh foods, log calories, or reach for the measuring cup every time you cook (or eat out for that matter!). Talk about an easy to follow, low maintenance approach.

I should point out that I'm talking about carbs that are high in starch, such as rice, grains, wheat, potatoes, pasta etc. These are the important types of carbs we must control. Vegetables and other fibrous carbohydrate sources do not fall under our 'hand serving' control. So feel free to add a cup of vegetables on the side (good choices include broccoli, peppers, mushrooms, cauliflower, zucchini, spinach), these are all full of nutrients and minerals, and are high in fibre, which keeps you regular and helps with satiety. They are also low in calories.

Some people say it's not possible to stay lean and build at the same time. That's not true. It is possible, however it's just hard work to get it right. But when you do get it right, it will quickly become second nature. You need to get it spot on and a lot of people don't have the desire, time or commitment.

GETTING IT SPOT ON!

Different days = different energy requirements.

Ok, this is as tricky as it gets, I promise.

We have now worked out a simple method of determining how much protein and starchy carbs you should be eating at each meal (using our fist method). Now we must tailor this to our body's daily energy needs. I've broken this down into three days with varying activity/ energy expenditure levels:

FULLY ACTIVE DAYS:

- Working a full day AND training;
- Or, working a full day AND a big recovery day (highly inflamed)

These days are seen as a high energy demand days, as you're working a full day AND also the body is requiring extra nutrients for the training you're doing. Also, there is a component of listening to your body here. You may not be training this day, only working, but you may feel your legs are very sore and your energy levels seem low for example. This could be in response to a big session the day before, or even a big week of training. There could be a change in your immune system and you think you could be coming down with something.

On days like this, we eat full serving portions of protein and starches; i.e. each meal we have a full (hand size) serving of protein AND a full (hand size) serving of starchy carbs. Aim for 4-6 meals per day.

MEDIUM ACTIVE DAY:

- Full work day, no training;
- Or, training day and no work;
- Or, a big recovery day (see explanation above)

These days are regarded as pretty high-energy requirement demand days. However, since you won't have the energy expenditure that you would have during a fully active day, you can afford to cut each serving of starch by a third. So instead of a full hand serving of starch at each meal, you only have two thirds of a serving (i.e. from the mid finger crease down to the wrist). Our protein serving remains constant at a full hand serving. Aim for 4-6 meals per day.

If you're not working but you're going to train that day, then follow this. Getting the idea yet?!

GETTING IT SPOT ON! (CONT.)

NON-ACTIVE DAY:

- No work, no training

For example, a day when you do not work your 9-5 job and you don't go training, you should cut the starch of each meal over that non-active day by a whopping two thirds! As our daily energy expenditure is going to be much lower as we're not working and training today, then we cut right back on our starchy carb intake. But remember to still have full portions of protein. This remains fixed on all types of activity days.

So on non-active days, we reduce our meal carb intake down to one third of a hand serving, and a full hand serving of protein. Aim for 4-6 meals per day.

As you can see, our fists/hands are our measuring cups for working our portion sizing. The protein portion remains constant, only the starch component changes according to activity levels. We offset carbs with protein and energy expenditure. Including the protein in every meal ensures you're always giving the carbs something to do with the protein.

SYNERGY OF NUTRIENTS

It's important to realise that the body is made up of multiple systems all working together in various ways. Just as all the different processes in our body work in synergy with each other, so does our body's reliance on the nutrients we feed it. Every day, we need a wide range of carbs, proteins, fats, vitamins and minerals. That's how the human body has evolved to function over thousands of years, and why diets that cut out a certain nutrient, or rely solely on one source of food, are not good for us in the long term. If you follow my nutrition outline above, you'll be sure to take in all types of nutrients that your body needs. However, it is also worth taking a daily multivitamin to ensure you're getting all the vitamins and minerals you need on a daily basis.

Remember, however, that vitamin tablets are called 'supplements' for a reason – they are exactly that, a supplement for a balanced, healthy diet. Don't think that if you're taking a multivitamin then you can cut out all your vegetables and eat the same meal every day!

POINTERS

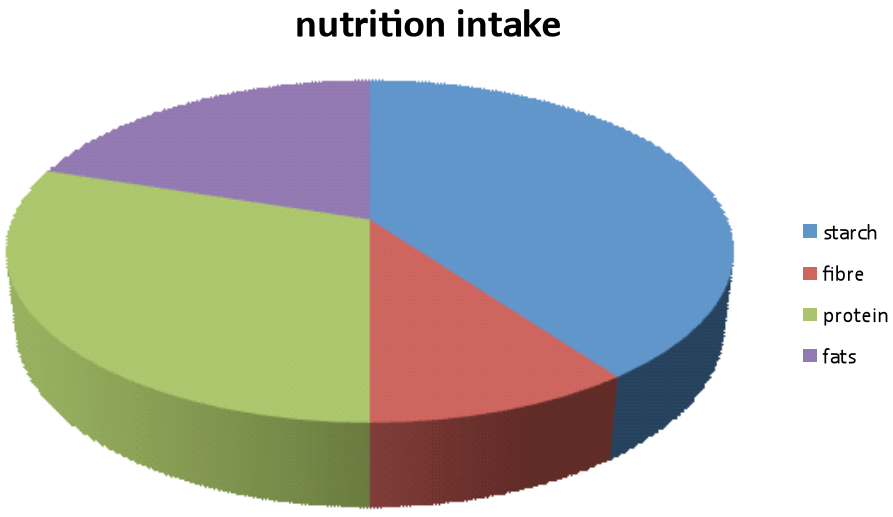
Nutrient intake = your energy requirements
Remember the difference between working/non-working days (which is big). Likewise, the difference between training and non-training days attached to working and non-working days.

Be accurate in the amount of carbs you need for that particular day's events/activities. Listen to your tummy rumble every now and then

If successful, you will be hungry in two hours flat after eating. *If you are not hungry in two hours, you are consuming too much food per serving. Keep cutting the serving sizes by a fifth until you get it right.*

Remain hungry for half an hour

It's very important that we learn how to differentiate the caloric demand. We can plan our week ahead...



PROTEIN	STARCH	FIBRE
Egg whites/yolks, 3 to 1 Tofu Fish/local choices **White meats:** Chicken Turkey **Red meats:** Beef Pork 1-2 serves a week of the red meats only, as they are high in fat and cholesterol	Beans Whole wheat Brown rice Basmati rice Oatmeal Whole meal pasta Lentils Peas Yams Tomatoes Sweet potato	Asparagus Beans Broccoli Brussel sprouts Cabbage Carrots Cauliflower Celery Cucumber Eggplant Lettuce Mushrooms Okra Peppers Spinach Zucchini

PROS AND CONS OF CARBOHYDRATES

Be it male or female training, for either size or dieting, don't be mistaken; carbs are where your long term successes lie - get them spot on and your weight management becomes second nature. Let's do a clinical breakdown of what's what. We are basically working with carbohydrates as the bigger percentage of our daily caloric consumption.

COMPLEX CARBOHYDRATES

These are the body's first and main choice of fuel. There are a few variations of carbs, and knowing them is the key to successful energy balance and a weight management/gain program. The demand for calories will most likely be different throughout the week. Adjustments to suit the requirements take practice to perfect, but as I said, at some stage down the track, it will become second nature!

STARCHY CARBOHYDRATES

Complex carbs in the body are very limited. The body can only store so many carbs for fuel and what it does store is constantly being used up, so carbohydrate stores in the body run out in a heartbeat. We find the best carbs in **non-refined breads, grains, wheats, pastas, potatoes and rice.**

FIBROUS CARBOHYDRATES

These are the indigestibles. The body uses them as roughage, and they are good at keeping you regular. That's not all they are good for though; they are fat binding and this is helpful in reducing fat absorption and blood cholesterol levels. Fibrous carbs are found mainly in unprocessed vegies such as the **leaves, stems, roots, seeds, skins and peels of fruits and vegies such broccoli, carrots, onion, celery etc.**

Please see food composition (fibrous) guide.

GLYCEMIC INDEX

The glycemic index (GI) is a reference guide. It is basically built around different carbohydrates, for which we have fixed numbers. To keep things nice and straightforward, these numbers relate to how fast the food you are eating is broken down in the body, and how much insulin the pancreas has to produce. It is one of the biggest things in weight management.

The long and the short of it is that the higher the number on the glycemic index, the more insulin that is produced. So it's a look into the real reason why people put weight on. Keep reading...

HIGH GI

If the food is a bit on the high side of the GI, it would be wise to stay away from it as much as you can and eat them earlier in the day when your activity is at its highest. Eat small amounts, or eat them after an intense bout of exercise when the body needs high glycemic foods the most.

TIME RELEASE CARBOHYDRATES

When one is training intensely for an hour to an hour and a half, it is important to deliver as much sustainable energy to that session as possible. You are able to deliver bursts of energy throughout your training.

Say, for instance, you were to use the glycemic index properly; you could achieve a workout where the glycogen was being released into the blood and then delivered to the target muscles of each session at different times throughout the session.

By mixing your pre-training meal with different glycemic index value carbs, you would get the above effect every time. Example: Brown/basmati rice, mixed beans, diced tomato, dried raisins, cucumber and a tin of tuna.

Each nutrient has a different rate at which it enters your blood stream, which will give you highly sustainable energy by releasing into the blood stream at different times! E.g. have a cordial drink with 20-30 grams of corn starch and a few grams of syrupy cordial in there, bingo! For that period when your blood sugar levels hits rock bottom, you are ready to top them right back up again. You could say that with good planning, you have hit it right on the head as far as fuelling what would be a high-energy overloading workout. This will give your progress a nudge in the right direction.

EAT MORE VEGETABLES/LEGUMES	GLYCEMIC INDEX
Soy beans	15
Kidney beans	27
Black Beans	30
Lentils	29
Split peas	32
Peanuts	14
Sweet potatoes	47
Yam	51
GRAINS	
Whole wheat pasta	40
Oats	48
Brown rice	55
Rice bran	19
Whole wheat pita	57
Whole wheat stone ground	53
Whole wheat	64
Pop corn	55
Sourdough	52
Shredded wheat	67
FRUITS	
Apples	36
Dried apples	29
Grapefruit	35
Orange	40
Dried apricots	31
SUGARS	
Fructose	23
EAT LESS SUGARS	
Glucose/Dextrose	100
Honey	87
VEGETABLES	
Parsnips	98
Carrots	90
White potatoes	70
GRAINS	
White flower pasta	56
Corn flakes	85
White rice	70
White bread	76
FRUITS OTHER THAN THE FRUITS MENTIONED ABOVE	

THE EMPTY GESTURE - SIMPLE SUGARS

Simple sugars are very rarely going to do you any good. If you were to take the population's obesity numbers, I don't think I would be wrong in saying that sugar would be responsible for the biggest percentage of damage done. It is due to the mass sugar consumption that more and more of the worldwide population is developing diabetes. We have a bit of an epidemic on our hands. And to be quite honest, simple sugars are making people fat.

Different body types will respond differently to simple sugars, but the majority of the population will simply stack on the fat! The really cool thing is that if you start leaving them out of your calorie intake, you will obtain instant results. Simple sugars are in just about anything you get your hands on, especially that which is processed. If it tastes nice, I can pretty much guarantee that it has at least 5-20 grams of sugar in it.

Surely you've noticed the trend whereby advertisers market 'healthy products' that are 99% fat free. To be quite honest, they are scams that take advantage of people not being educated. These products generally contain 20 grams plus of sugar. They produce a huge impact on the insulin levels every time! So it is good practice for a healthy lifestyle to leave sugar out.

INSULIN - SUGAR AND POST TRAINING

INSULIN/SUGARS POST WORKOUT

Pros

Simple sugars are not always bad for weight management; we can take advantage of them after we train. By emptying the muscle of energy and damaging the tissue, i.e. weight training, endurance training, if the muscle uses part, or preferably all, of its energy, we can take advantage by stimulating insulin levels.

By taking high amounts of sugar post training, we stimulate the proper function of the pancreas/insulin levels. Insulin is a hormone that is even more anabolic (growth-promoting) than testosterone! Insulin's job is to deliver the nutrients straight to where they are needed most.

There are enzymes that do the same job, however insulin beats them hands down. It is excellent practice to consume a big mix of complex carbs and between 40-70 grams of simple carbs, i.e. sugars. Do not forget protein to obtain the best results and recovery from your training. And remember, insulin is more 'anabolic' than testosterone.

Cons

If, however, you are not training and are in no need of the sugar for fast energy replenishment or storage of muscle glycogen stores, the body's insulin levels will rise to do its work and yet there will be no stores that need replenishing. There is, therefore, nowhere for the energy to go but to your fat stores, so the metabolite will deposit it all around your body's fat stores because there is no need for it anywhere else... making sense yet!?

Common sugar types found in common foods

Just to make things harder, there are many different types of sugars, so let's just leave them all together to make it as easy as possible. Some of the main types of sugars you will come across: **Glucose/dextrose, Sucrose, Galactose, Lactose, Honey**

PROTEINS - THE 'BRICKS AND MORTAR'

The word protein comes from the Greek language, meaning 'of prime importance'. Being of such high importance, protein is the most abundant organic compound in the body. As the heading says, protein is the bricks and mortar of the body.

What are the functions of proteins?
Protein/amino acids work primarily in the growth and repair section. All the time, the body is growing, repairing, breaking down and regenerating. It is a fact that every part of one's body matter breaks down and regenerates every 2-3 years. Hence, the old saying "you are what you eat" is very accurate indeed. Muscle growth and repair are known as anabolism. So in a nutshell, it is 'of prime importance' that there are a healthy 20% of daily calories derived from good quality protein food sources. However, bear in mind that high protein diets such as the Atkins diet aren't good for you.

There is another fancy word popping up, which is catabolism, or muscle breakdown. Let's keep it simple, this occurs:

-When energy stores are empty

-If you have not been eating correctly

-When there are long intervals between meals... starvation tactics that generally add fat and strip lean mass and body protein... not good! -When not getting the correct, essential amino acids that the body cannot make itself (see essential amino acids)

- With strenuous training bouts over one hour. This reduces blood glycogen stores and can quickly activate self-mutilation mode (catabolism or muscle breakdown)

THERMOGENIC

Muscle mass is living matter and therefore it must have energy to maintain itself or it will break down and disappear. So when the body goes catabolic, its nutrient availability drops. Low blood sugar level proteins are always the option for energy if that's all that is available, whether you are a body builder who needs to lose 20 kg or just focusing on weight management for general wellbeing and longevity. Your muscle mass is the key to staying lean. Once you have built it, you have to work on keeping it.

The more lean mass on the body, the better and faster the metabolic rate churns up calories... even at rest you are burning calories 'thermogenically'. If you are increasing thermogenically, the body will demand and consume a bigger percentage of fat from around the body... BINGO! To stay at optimal metabolic capacity, there's little room for error. Keep it supplied with the nutrients it needs or lose it.

PROTEINS - THE 'BRICKS AND MORTAR' (CONT.)

ESSENTIAL AMINO ACIDS

Protein is a combination of a host of amino acids. Your body can make most of protein's 21 amino acids from carbs. However, there are essential amino acids that cannot be made in this way: isoleucine, leucine, lysine, methionine, phenylalanine, threonine, tryptophan, valine, histidine, and arginine. If the body can't make it from carbs, we have to get it from the protein sources that are listed below.

PROTEIN SOURCES

Fish
Which are high in polyunsaturated fatty acids and are an excellent source of proteins and fats. Fish is most definitely the number one choice.

Poultry
Such as chicken and turkey. For the leanest choice, always opt for the breast of the bird. Stay away from the skin and thigh as that is where most of the fats are stored.

Eggs
If you are making an omelette or scrambled eggs, it is very good practice to use a 3 to 1 ratio... so one whole egg with yolk and two or three egg whites. Straight away you will cut between 6 and 9 grams of fat from your meal. Over the year, this has a great impact!

Red meat
Also a high source of protein. It is also, however, high in saturated fatty acids and cholesterol. There is a big trend for people to totally omit red meat from their diet and this has an impact on anaemia numbers in women due to the lack of iron in their diet. So what do we do if we need it but don't want too much? A good recommendation is to eat red meat 2-3 times per week maximum! Eat as lean a cut as you can get your hands on. Over the year, any effort in this area will help you achieve your goals not only in body fat percentage, but also in blood cholesterol levels, which are linked to heart disease and cancer.

Tofu
Is a great source of protein.

FAT IN YOUR DIET

Get the good stuff in there!

SATURATED FATTY ACIDS

This is the fat that you want to stay well clear of as much as possible. It mainly comes from animal origins. Despite the common myth that coconut oil is a bad fat, on account of it being saturated, coconut oil is actually predominantly composed of medium-chain triglycerides (MCT), as opposed to long chain. MCTs break down more efficiently as a fat, and coconut oil has been shown to have numerous health benefits. Using coconut oil has a big advantage if you're looking to boost your calories throughout the day.

Saturated fat and CHD
A high percentage of saturated fat has been linked to heart disease. High saturated fats in your diet facilitate cholesterol synthesis in the liver. Saturated fatty acids are thought to stimulate a greater rise in blood cholesterol than dietary cholesterol itself!

Cancer
Cancer is one of the top causes of death among adults worldwide. High concentrated saturated fat diets have been implicated as being responsible for a host of cancers such as breast, prostate and endometrial cancers.

MONOUNSATURATED FATTY ACIDS (OMEGA 6)

Found in high concentrations in some vegies/nuts, this is a good fat to consume. Some examples of food that have a fairly good amount of these fatty acids present are: Almonds Avocado Olives

POLYUNSATURATED FATTY ACIDS (OMEGA 3)

Flaxseed oil contains omega 3, 6 and 9, a 5 star fat and the best one to use! In addition, there are:

Peanuts
Beef
Lamb
Veal
Fish (there have been studies pointing to fish oil increasing oxygen absorption by the body!)
Sunflower, which include:
Corn Canola Sesame oils

Mono and polyunsaturated fatty acids are very healthy for your body and are essential for myriad internal functions.

As stated above, there have been studies on high fish oil diets that demonstrate an increase in the body's oxygen absorption. If this is increased even by a small percentage, this results in a boost in energy production, which of course produces better training performance and results!

SOME IDEAS

BREAKFAST: 06:00AM

Cereal such as oats, muesli, bran, and a low carb protein shake. Toast and scrambled/ poached eggs. If having cereal, stay away from ones that are fully loaded with simple sugar. Try and go for oats. Also, a multivitamin and a glass of water.

BRUNCH: 09:00AM

Wholegrain sandwich with tuna, chicken or grilled fish. Vegemite on toast, scrambled/ poached eggs and toast. Sandwiches with whole meal/grain and a good balance of fresh grains with tuna/chicken... and a glass of water.

LUNCH: 12:00 NOON

Baked potatoes and tuna salad. This is a perfect time to start switching the body on with rice (basmati or brown), whole meal pasta, potatoes or couscous, along with proteins like chicken, fish or tofu. And don't forget some water.

AFTERNOON: 3:00PM

Dried apricots, almonds, grapefruit or a granny smith apple (only if you are on the run). Potatoes, rice, pasta, beans, fish, chicken, red meat, tofu. Water.

DINNER: 5:30PM

If you are trying hard to cut fat percentage aggressively, then from this time, we simply stop high GI starchy intake and concentrate on low GI legumes with chicken, fish, proteins and greens/salad. (We must try and make our fat loss gains using as much starch in the diet as possible). You can mix a few beans through this meal so as to keep the body used to carbs, but keeping them low GI (refer to glycemic index).

However... If you are either very lean naturally and it's hard for you to gain weight, or if want to 'bulk up' so to speak, don't hold back on the carbs in this meal. You could certainly add a little rice, bread, potatoes or pasta at this time if you are more concerned with building muscle mass as opposed to getting optimally lean as well as building mass. Once you want to lose the fat, all you do is adjust later to the low GI option. Drink a glass of water.

SUPPER: 8:30PM

Again one is going for no starchy carbs, just some sort of salad with a nice, tasty lean steak or a serve of chicken breast or fish. Add steamed vegies (greens). When having a salad, one should add balsamic vinegar as the dressing and maybe a little bit of chilli, or low fat cottage cheese. Drink a glass of water. Make no mistake, this last meal is where everybody has to dig deep and not be tempted by the carbs that we so crave in the evening. It never gets easy, so you must always be clinical and think that if you want to get leaner, you must put all the effort you can into it. **This effort will show through in your achievements...**

SUPPLEMENTS

PROTEIN SUPPLEMENTS

With our hectic schedules, meal replacement shakes are there to be taken advantage of. They really do make a difference in achieving your goals. There are dozens on the market, of which GEN-TEC 100% Pure Whey is a leader, and can be taken once or twice a day. This is a great meal replacement to get you lean. These shakes are perfect to use for a pragmatic subtraction of carbs; say you wanted to cut the starch and sugars from a meal, just to kick the fats in as energy for a bit, then these low carb meal replacements are perfect.

CARBOHYDRATE SUPPLEMENTS

GEN-TEC Pure Carbs contains high quality medium-chain carbohydrate polymer, which induces a high insulin spike to promote an anabolic hormone response to training. Using Pure Carbs with Pure Whey, GEN-TEC's Creatine 320 and Glutamine 320, will seriously assist absorption of each of these nutrients. A good post workout shake would consist of all four of these.

AMINO ACIDS

GABA (gamma-aminobutyric acid). Yep, the best of the lot as far as raising human growth hormone (HGH) serum levels. This amino acid is the most effective supplement in raising HGH levels by 400-600% within 20 minutes!

GEN-TEC *branched-chain amino acids* (BCAA): L-leucine, L-valine, L-isoleucine (should be taken with meals).

Glutamine inhibits the breakdown of muscle as energy. It also helps to restore the health and integrity of the immune system, preventing overtraining syndrome. It has also been shown to cross the blood-brain barrier, increasing concentration.
GEN-TEC's Glutamine 320 is an excellent one.

There are a couple of amino stacks out there that can really make a difference to your HGH levels, called **arginine and ornithine**. These two should be taken on an empty stomach both straight after training and just before sleeping. It is important that there are no other proteins present when taking these supplements. This means that pre-sleep GABA and arginine/ornithine mix should be swapped around a bit.

CHROMIUM PICOLINATE

This is a very underrated nutrient indeed. It creates an anabolic environment in the body by basically giving your body's metabolism a nudge in the right direction in regards to fatty acids, carbohydrates and proteins. Take between 200-600mcg depending on your body size.

SUPPLEMENTS (CONT.)

CREATINE MONOHYDRATE

This is good, although it needs to be used correctly, otherwise nobody really knows what to do with it and where in their training regimen to implement it.

Creatine monohydrate is a muscle cell volumiser. What it does is pull water into the cells of the muscle. The best time to use creatine monohydrate is when one plateaus in their gains with strength training; when peak condition is achieved and one wishes to use it purely as a cell volumiser. This pulls the water into the muscle cells, giving muscle more size 'volume'.

You can take creatine during your workout to give further explosive energy; it's a good idea to mix it with corn starch and sugary cordial. Mixing these different nutrients will break them down at different speeds, giving you time released bursts of energy. You can also take it post workout for growth and volume stimulation. It's best if taking it post workout to only mix it with a high sugar drink. Dextrose is best around 30 grams per 5 grams of creatine. As soon as you've warmed yourself down from training, wait 30 minutes and then eat your post workout meal. GEN-TEC Creatine 320 is a leader in the creatine market.

ACETYL L-CARNITINE

A non protein amino acid that carries fat cells into the muscle for energy. There is no doubt about the effectiveness of acetyl l-carnitine... if you want to get lean, get on it. I might add that there are a few variations of this nutrient on the market, but GEN-TEC Alca Fuel is the best.

So when should you use acetyl l-carnitine? If you are looking to just lean up, then take it on an empty stomach 20 minutes before you train. Have a stiff coffee with it and get your heart rate at 70-80% of maximum.

These nutrition companies generally tell you to take less than the effective amount, as it would be that bit more expensive. This is why people say they tried the stuff and nothing happened. Double the dose and it will shift those fat cells. Depending on body weight, you should take 1-2 grams for effectiveness.

THERMOGENIC AIDS

These go hand in hand with acetyl l-carnitine and cardio training. There is usually a little of the acetyl l-carnitine in them, but not enough to really maximise the effect of the acetyl l-carnitine. They predominantly contain caffeine, root and leaf extracts from a variety of fruit peels, seeds and barks. These are designed to heat the body up and are taken over the day as an energy boost. If one is sensitive to caffeine, watch the dosage. If one has high blood pressure, these should be avoided.

Effective products in this category include GEN-TEC Ultimate Thermo Fuel, GEN-TEC Psyched, and USP Labs Jack3d.

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