

NUTRITION & HEALTH

Prof. Valeria Szedlak-Vadocz M.D. PhD

Slim Formula, or the secrets of slenderness

Do not seek for magical solutions to get rid of your extra kilos! The secrets of losing weight are far simpler than we may believe; only they should be applied properly and prudently.

It is almost general that the majority above forty become overweight. Unfortunately obesity nowadays starts already in childhood. It can be attributed more to the faulty eating habits than genetic make-up. According to a survey, the average European woman puts on minimum seven kilograms between the age of 20 and 50. Overweight people usually try to find excuses to their excess kilos. And those who have no problems with their weight, usually insist that there is no trick in losing weight: we should simply consume less calories than we burn. Alas, this is far more complicated (more difficult) than we may think!

Why is it so easy to put on kilos and why is it so hard to get rid of them? – we may ask the question with reason.

Losing weight can be a difficult and tiresome task. Averagely 95 out of 100 dieters fail, no matter which method they try. However it is well-known that being overweight is not only uncomfortable, but may lead to many ailments – diabetes, hypertension, cardiovascular diseases, some types of cancer, etc. The older we are the more difficult is to get rid of our excess weight. 95 of 100 people fail, because they ignore the basic rules of human physiology. Practically it means that when we go on a strict diet, that is we drastically cut down the food intake for more than three days in a row, our body faultily takes it as a

signal of starving, and automatically slows down our metabolism, in order to conserve and store as much fat as possible. This renders the process and degree of losing weight extremely difficult.

Similarly, when we give up our diet, our metabolism has already become so slow, that even if we eat approximately half as much as before starting the diet, we will start gaining weight again. That's what we call "yo-yo effect". To put it briefly, the majority of the slimming diets are built upon a "failure effect mechanism" that results in a discouragingly low success rate.

Another common problem is setting an unrealistic goal. I mean you starve to gain a shape that is impossible to achieve with your genetic make-up. Disappointment may well slow down or even stop the process of losing weight. Therefore it is important to accept our basic build, to realize that *not everybody can have a looks of a model.*

WHAT IS THE SOLUTION THEN?

Let's start from the fact that according to the latest scientific results obesity not exclusively and not in every case results from gluttony. This is stated by the French physician-scientist *Dr. Pierre Nys*. According to him the main cause of the proneness to obesity is that the equilibrium of the homeostasis of our body becomes upset. To put it squarely, the disturbances occurring in the general state of equilibrium and metabolism of our body lead inevitably to obesity. Furthermore, our health (our harmonious existence) primarily

influenced by our lifestyle, as well as by our eating habits (what, how often and in what composition we eat). Dr. Nys has identified three basically different types prone to obesity: namely the *insulin*, *leptin* and *stress types*, and the mixture of these. In his opinion the reaction of our body of upset equilibrium (non-equilibrium) depends on the type we belong to.

In the *insulin type* the problem is that there is no proper balance between the rate of tissues utilizing sugars as energy, and insulin production. This means that tissues would not react properly (they are not sensitive enough) to insulin. This insulin-resistance of the peripheral tissues results in insulin overproduction and a dramatic fluctuation of blood sugar levels, and for this reason the persons involved keep having snacks all day long. With the increased sensation of hunger they consume more and more food, urging the pancreas to produce insulin in even greater amounts. Insulin stimulates the process of fat storing and the more you eat the more energy turns into fat. At this point the magic circle of putting on weight closes up.

Contrasted with the above, *leptin types* diet rigorously, skip some meals, especially breakfast and they have already forgotten the taste of most of the delicious dishes. Nevertheless they are unable to lose weight! The problem exactly is that they eat less and less, their bodies interpret this as “life-threatening” starvation, and would not produce enough leptin. This hormone controls the levels of the energy stores of the body and sends a signal to the brain if the body needs food, then generates satiety feeling at the same place. If we starve regularly, under the “life-saving” supervision of our brain, our body stores every bite as a Bactrian camel.

The weightloss of *stress types* is made impossible by their accelerated lifestyle. The busier they are, the more excited their nerves and adrenal glands get. Consequently they produce increased amounts of adrenaline and cortisol. As a result they get hungry soon which the body perceives as starving, producing less leptin as a consequence. As their mind would not get the “I am full” sign, stress types start eating again, taking in more calories than they can burn, which results in becoming overweight.

Of course mixed types occur more frequently than pure ones, as for example in the following combination: insulin-leptin, insulin-stress, leptin

stress, etc. Besides of the reasons listed above, we should mention some important factors, which can play a part in the process of becoming overweight. These are: *eating for our blood type*, *exercising*, *emotional balance*, or the lack of these.

Presently I would not like to dwell on the significance of eating according to our blood type as it has been treated in detail by many publications, but I still want to highlight its importance.

EXERCISE

Regular exercise and physical activity make our body burn more calories and by speeding up our basic metabolic rate, weight loss continues even in state of rest. Exercise regulates blood sugar levels, boosts energy and enhances general well-being. Well-being and elevated energy levels may further increase our physical activity. Vigorous exercise for 15-20 minute, three times a week can be a great weight management aid for most of us. However our exercise program should not necessarily include intensive activities as brisk jogging or running, especially if we are overweight and in bad shape. A deliberate, long walk may be the ideal activity for almost everyone. As walking consumes less energy than jogging and running, it should last minimum for 40 minutes each time. Other activities, as climbing stairs, cycling or swimming may also have excellent results as long they are done on the regular basis (preferably every day) but at least three or four times a week.

EMOTIONAL BALANCE

At times weight problems can result from poor self-esteem and feeling of inadequacy. However most of the people can lose weight and keep it off once they have overcome these obstacles, and are able to visualize themselves as being attractive and having their ideal weight. If you feel that your weight problems may have emotional roots, consider appropriate measures to resolve them.

“That which we cannot accomplish in life, our body cannot utilize in the form of food neither.”

István Gonda has exposed the above statement very frankly and expressively in the article

published in *Természet Gyógyász Magazin* ("Natural Healer Magazine"):

"Our attitude to nutrition is the indicator of our mental and emotional balance. There are mental, emotional and physical "foods". All of us are very concerned in filling our stomach more than once daily. But at the same time do we fill our heart with love; do we fill our mind with high spirited thoughts as well?

Sure not, if we suffer from weight problems. Excess weight, as well as the state of our bones and skin are indicators of lack of love. In case of elevated sugar levels (sugar = love) we do have emotions deep inside, but we are unable to show them. Hunger, dropping of blood sugar levels should be understood as dropping of the level of love. No physical food can fill up this void on the long run. Spiritual and mental feeling of void can be reduced only temporarily by food. The more racking is the void within, the richer and heavier food we crave for. Since our body is the imprint of or mental and emotional state, we cannot deceive ourselves with taking in physically lighter food as followers of healthy nutrition, our depressing, covetous thoughts and feelings are far stronger than that. Only unconditionally loving, highly spiritual people do not deceive themselves, if they consume food of *high vibration*, without synthetic components (synthetic food = affected behaviour). This pure inner state cannot be achieved with force. We can reach it by arriving to a higher spirituality. It this has not happened so far, we cannot feel satiety even if we consume pure food. Actually, we live in constant nervousness and tension. Our days are characterized by substitute actions, as endless hurrying, constant time pressure, intensified sensuality, continuous shopping rush, as well as having snacks obsessively.

When we say "I feel like eating something", in reality we do not crave for physical food.

Mental "food" is not identical with the bunch of intellectual information, because the latter is oppressive and indigestible in lack of deeper insight. That which we are unable to utilize mentally, stagnates in our bowels in the form of analog food, undigested.

Our body is sincere all the time. There is no use in deceiving ourselves and to the outside world, our spiritual distress comes unveiled. For instance, when we are deeply fatigued, our hair loses its hold, we experience dandruff, hair loss

and premature graying. Or we must wear glasses, because we are reluctant to see the world as it is.

Every food has a specific level of vibration. Foods can be grouped according to a hierarchy. The purest ones are vegetable, fruits, spring water and whole grains. Meat and alcohol have the lowest vibration. People should consume food that suits their spiritual level. The extent of our spiritual and mental development becomes evident when, ignoring our knowledge of a healthy diet; we rush into the kitchen and start devouring the goodies we have been hiding even from ourselves so far. This is the point when we are finally sincere to ourselves. At that time our mood and well-being get enhanced because we accept ourselves as we are.

Those who remain dominated by vanity, seek for substitute actions: light a cigarette, have a drink, escape from themselves to a company, or in extreme cases (as many people do it in the world of "stars") resort to drugs.

Practically there are no weight increasing or weight reducing foods. We do not put on or lose weight as a result of eating. Everything depends on the information streaming from vibrations. If we get overweight even if we eat food we like (eat according to our spiritual level), the fault can be found undoubtedly in our social relationships. If we cannot reconcile our spiritual requirements with those living in our environment, as a self-protection, we start refusing them unconsciously.

We construct a shield layer out of fat and/or water to keep our partner off. Even in case of expectant mothers, overweight does not occur as a direct result of pregnancy.

We start losing weight if we switch to foods which are of higher quality than our own vibrations. However, because of this difference, our diet is accompanied by constant inner tension. We feel an irresistible impulse to channel our aggression accumulating again and again: we shout angrily at others, we are impatient, provoke others, and make rapid, rough movements. If we suppress our aggression also, we experience allergic breakouts, (aren't we allergic to SOMEBODY and not to something?!), or we start to have gastrointestinal complaints.

The consequence of our self-deception that is we would like to look purer than we are, is

called yo-yo effect in common talk. This see-saw exists as far as we leave behind those possessing relationships we are in only for passion or convenience.

Yo-yo results from the faultiness of our lifestyle, not from our diet. The same is true to the two most extreme dietary disorders, bulimia and anorexia. Starving for many weeks corresponds to the phase of self-deception (“I am happy indeed!”). Than as we regain our kilos the moment of truth arrives. We break down mentally, and we suffer from lack of emotions exactly in the extent our body has become overweight by then. Since we lack mental and spiritual sources of happiness, we desperately resort to the physical ones time after time.

We can remain in ideal shape without ascetically following the seemingly miraculous diets only by finding the right proportion in our social relationships.

Our figure depends on how we feel in our skin as a man or woman. Weight problems always result from poor self-esteem.”

This is the end of the quotation from the article of István Gonda. His message is very illuminating and worthy of notice.

We should add that without regular intake of properly compounded dietary supplements, successfully started weight losing processes may slow down, than may come to a standstill. *Slim-Formula*, the latest product of CaliVita is created to make up for these shortcomings.

– *Slim formula* is a dietary supplement in form of tablets that can be a great aid for everyone in weight control process, especially for those who are properly exercising. The ingredients of this complex body weight regulating formula act naturally and synergistically, helping our body to regain its natural balance as well as promoting effective food utilization. The success of the slimming diet is up to the efficiency of these processes. *Slim formula* contains substances of waste-removing, detoxifying, digestion and intestine function enhancing effects, namely: green tea, ginger, turmeric extract, ground fennel seed, prickly pear cactus rich in vegetable fibers as well as minerals; weight regulatory and thermo genesis stimulating substances, such as chromium (in chelate form) L-carnitine (a fat burning and energy transforming amino acid) as well as Gar-

cinia Cambogia extract, which contains significant amounts of hydroxycitrate (HCA).

1 tablet contains:

Green Tea (<i>Lat. Camellia Sinensis</i>)	50 mg
Nopal (<i>Opuntia sp. Cactus</i>)	100 mg
L-carnitine complex	40 mg
Fennel seed (<i>Lat. Foeniculum vulgare</i>)	40 mg
Turmeric (<i>Lat. Curcuma longa</i>)	25 mg
Ginger (<i>Lat. Zingiber officinale</i>)	50 mg
Chromium picolinate	50 mcg
Lecithin (<i>Phosphatidil Choline</i>)	25 mg
Garcinia Cambogia (<i>std. 50% HCA</i>)	100 mg

FEATURES AND EFFECTS ON THE BODY OF EACH INGREDIENTS:

GREEN TEA

(*Lat. Camellia sinensis, Thea sinensis*)

Tea or Camellia Sinensis the member of the Theaceae family is one of the most ancient beverages in the world, and next to water is the most widely consumed. This beverage that has been consumed in Asia for centuries has been the focus of scientific research. Since ancient times the Chinese have been deriving considerable health benefits from drinking green tea, traditionally known to help keep the body in god condition. The active constituents in green tea are a family of polyphenols (catechins) and flavonols which possess potent antioxidant activity. Tannins are large polyphenol molecules, form the bulk of the active compounds in green tea, with catechins comprising nearly 90%. Several catechins are present in significant quantities; epicatechin (EC), epigallocatechin (EGC), epicatechin gallate (ECG) and epigallocatechin gallate (EGCG). EGCG makes up about 10-50% of the total catechin content and appears to be the most powerful of the catechins – with antioxidant activity about 25-100 times more potent than vitamins C and E. A cup of green tea may provide 10-40 mg of polyphenols and has antioxidant activity greater than a serving of broccoli, spinach, carrots or strawberries. A number of commercial green tea extracts are standardized to total polyphenol content and/or EGCG content. In terms of protection against heart disease, the potent antioxidant properties of polyphenols would be expected to reduce free radical damage to cells and prevent the oxidation of LDL cholesterol (o-LDL particles)– both of which would be expected to initiate the formation of atherosclerotic plaques.

Besides of the clear benefits of green tea as an antioxidant, recent studies have suggested a role catechins have in promoting weight loss. In one animal study, the anti-obesity effect of green tea was evaluated by feeding different levels of green tea (1-4% in their diets) to female mice for 4 months. The study found that the mice receiving the green tea in their diets had a significant suppression of food intake, body weight gain and fat tissue accumulation. In addition, levels of cholesterol and triglycerides were lower in mice receiving the green tea diet. Perhaps the most interesting finding from this study was that Leptin levels in serum showed a decrease with green tea treatments – indicating that green tea may have a direct effect on the regulation of body weight (downward).

In some studies, green tea is associated with a mild increase in thermogenesis (increased caloric expenditure) – which is generally attributed to its *thein* (caffeine) content. At least one study has shown that green tea extract stimulates thermogenesis to an extent that is much greater than can be attributed to its caffeine content per se – meaning that the thermogenic properties of green tea may be due to an interaction between its high content of catechin-polyphenols along with caffeine. A probable theory for the thermogenic effect of green tea is an increase in levels of norepinephrine – because catechin-polyphenols are known to inhibit catechol-O-methyl-transferase (the enzyme that degrades norepinephrine). One study examined this theory, and the effect of green tea extract on 24-hour energy expenditure, in 10 healthy men – who each consumed 3 servings of green tea extract (50 mg caffeine and 90 mg epigallocatechin gallate), caffeine (50 mg), or placebo (at breakfast, lunch, and dinner). The results of the study showed that, compared to placebo, the green tea extract resulted in a significant (4%) increase in 24-hour energy expenditure (approximately 800 calories per day) and a significant increase in the body's use of fat as an energy source (24-h Respiratory Quotient). In addition, the 24-hour urinary norepinephrine excretion was 40% higher during treatment with the green tea extract than with the placebo. It is interesting to note that solitary treatment with caffeine in amounts equivalent to those found in the green tea extract (50mg) had no effect on energy expenditure based on fat oxidation – suggesting that the thermogenic properties of green tea are due to compounds other than its caffeine content alone.

Summerised, green tea's effects are:

- Anti-atherogenic (reduces cholesterol & triglycerides)
- Reduces blood clotting
- Enhances immune function
- Enhances weight loss
- Anti-cancerogenic

Green tea extract, among others exerts a beneficial effect on the function of the digestive system, removes efficiently waste products and toxins from the body, as well as stimulates thermogenesis. Because the above listed properties it is a potent weight loss ingredient. It acts synergically with turmeric and ginger.

TURMERIC

(*Lat. Curcuma Longa, Curcumin*)

Turmeric (*Lat. Curcuma longa*) is a perennial plant whose rhizome has long been used for medicinal purposes, as as colouring agent for foods, and known as the “spice of life” which has been and still is widely used in Indian cooking. *Turmeric* (a spice in curry powder), is a common spice in the Indian cooking and long in use by healers practising Ayurvedic medicine. The active principle extracted from curcuma is a powerful phytochemical called *curcumin*, which has potent antioxidative properties.

Turmeric has many beneficial properties. Turmeric, a long-time folk remedy for liver disorders, can reduce inflammation in the liver and strengthen liver function. It has also been used as a remedy effective for the alleviation of the unpleasant symptoms caused by gallbladder disorders.

The powder called *turmeric*, contains *curcumin* – a polyphenol composed of two *ferulic acid* molecules linked together, chemically termed *diferuloylmethane*. Turmeric contains two curcumin derivatives. The therapeutic uses of curcumin, are very similar to those of many flavonoids, *cyanidin* included. In an experimental study (published in the Journal of the American College of Nutrition) administration of curcumin prevented cancer development in the 68% of the treated animals. Curcumin is a potent anticancer compound which can retard cancer at both the initiation and promotion phases –just like cyanidin and many other bioflavonoids. Moreover curcumin shares many of the same mechanisms of action, namely the *antioxidant effects, stimulation of drug-metabolising enzymes like the glutathio-*

ne-s-transferases, and increased levels of *glutathione* in the liver and other tissues.

Curcumin has well documented anti-inflammatory effects in a variety of animal models. Two main mechanisms of action are inhibition of *lipoxygenase activity and antioxidant effects*. Not surprisingly, cyanidin and many other bioflavonoids exhibit, also powerful anti-inflammatory activity with identical mechanisms of action. Two double-blind, clinical trials of curcumin supplements (in arthritis and postoperative inflammation) documented its therapeutic usefulness (reviewed in reference Ammon et al, 1991). The doses used were 120 and 1,200 mg/day/person, respectively.

The list of medical applications common to curcumin and flavonoids is a long one, and includes: *protection against chemically induced liver damage, improvement in the lipid profile of blood, reduction in the extent of platelet aggregation, antimicrobial effects, and immune stimulation*.

Curcumin contains powerful antioxidant, anti-carcinogenic, and anti-inflammatory compounds, decreases ornithine decarboxylase (ODC) activity, promotes gastric integrity, increases mucin production, offers gastroprotective effects, promotes secretion of digestive enzymes, and improves liver function. (Citation taken from Peter D'Adamo's: Live Right 4 Your Type, p.136)

Curcumin is nowadays included in many herbal formulas designed to relieve rheumatoid arthritis. In patients affected with rheumatoid arthritis, double-blind studies have shown that curcumin produced significant improvement comparable with that achieved by using phenylbutazone, a prescription nonsteroidal anti-inflammatory drug (NSAID), but without the known harmful side effects of the latter one. Curcumin can also very effectively reduce the level of the intestinal toxins. Curcumin is a potent *inhibitor of polyamine synthesis*. It is usable *by all blood types*. It is a chemo protective, especially for non-secretors.

GINGER

(*Lat. Zingiber officinale*)

This herbal spice has been used in Ayurvedic medicine for many thousand years. It can be applied to cure colds and menstrual pains since it causes hyperaemia and attracts phagocytic cells to the hurt area (a positive haemotaxis) in acute stages of inflammation. Externally it has been

used as a *rubefacient* (to increase local blood flow in the skin, as well as in other body parts), and as *analgetic* (pain-killer) for toothache, headache and sinusitis. Ginger ale is used to ease gastrointestinal disorders, such as flatulence and indigestion, nausea and vomiting both in pregnancy and seasickness (kinaetosis). This drink is still readily taken to promote digestive functions.

The anti-inflammatory activity of ginger is manifested through a mechanism characteristic of *non-steroid anti-inflammatory drugs (NSAID)*. This widely applied spice is a biologically more active inhibitor of the prostaglandin (PG) synthesis (the cyclo-oxygenase route starting with the arachidonic acid) than onion or garlic. It exerts an anti-inflammatory effect by slowing down the biochemical routes connected to inflammatory reactions and by inhibiting the synthesis of the inflammation mediators. Ginger has a wide sphere of application in Ayurveda, the traditional Indian medicinal system, such as a remedy for arthritis, pain, fever, and strong potential against blood clotting. By their potency to lower the adhesion coefficient of the platelets *ginger, garlic and onion* can substantially reduce the risk of cardiac infraction or cerebral haemorrhage. In a series of experiments conducted on rats, scientists in Japan have discovered that ginger extract inhibits the occurrence of gastric laesions by 97%. The authors deduced that the use of ginger as a remedy for gastric disorders in folk medicine is very efficacious owing to its components, *zingiberen*, the main terpenoid, and to *6-gingerol*, the principle that gives the characteristic pungency and smell of ginger.

FENNEL SEED

(*Lat. Foeniculum vulgare*)

The seed of fennel (*Foeniculi fructus*) contains at least 3% essential oil, but in some cases as much as 75%. The main active agent of the essential oil (*Aetheroleum foeniculi*) is anetol (50-80%) which is identical to the main ingredient of the essential oil of the fruit of anise (*Pimpinella anisum*). However, unlike anise, the essential oil of fennel contains *foeniculin* and *fenchon*, this is the reason it has a bitterish, pungent taste.

The fruit of fennel has diuretic effects, and at the same time it exerts a mild antispasmodic and antibacterial effect in the urinary tract. Its essential oil is used in preparations curing nephrolithiasis, since it promotes the formation of protective colloids in the urine.

Due to its antispasmodic effects it is used as a component of certain laxatives. As a carminative, it is utilized similarly to cumin (*Carum carvi*); it is given regularly to infants. Fennel seed is used in expectorants together with or instead of anise (*Pimpinella anisum*).

NOPAL, prickly pear cactus
(*Lat. Opuntia sp. Cactus*)

The multifunctional dietary supplement

Today, in this highly advanced technological age, there is, perhaps more than ever, something vital missing from people's lives. This lack of "something" manifests itself through increase in chronic, so called "civilization diseases" such as cancer, cardiovascular diseases, metabolic ailments, obesity, diabetes mellitus, elevated blood lipids, osteoporosis and various autoimmune disorders.

Healthy lifestyle includes dealing with stressful situations, physical exercise, sufficient rest, a nutritious diet, along with the consumption of dietary supplements. Those living accordingly will soon experience a favorable change in their quality of life. The various herbs make very valuable dietary supplements because – acting as natural catalysts – *work together with the human body*. These gifts of nature often not praised enough may help keep our body healthy, at the same time may restore the upset equilibrium as well as stimulate healing process. Undoubtedly, one of these herbs of extraordinary properties is Nopal.

What is Nopal?

Nopal (*Prickly pear cactus*), is a member of the Cactus family classified as *Opuntia* species. Since 1983 extensive research has been carried out on Nopal, and the following well documented effects or health benefits of Nopal have been found:

- Anti-oxidative
- Glycoregulatory
- Hypolipemic (blood lipid reducing)
- Body weight regulating
- Colon cleansing
- Regulations of gastrointestinal functions
- Restoration of healthy digestion
- Regulation of liver function
- Supplements vegetarian diet as a substitute for amino acids

Besides the above mentioned beneficial effects Nopal affects favorably the function of glands, the nervous as well as the circulatory system.

These and some additional benefits may seem unrealistic to some physicians making the impression as if Nopal was some kind of a "panacea". However, these effects are scientifically testified, and are due the properties of the constituents of Nopal. It has been discovered that Nopal is the source of numerous vitamins, minerals, as well as 17 kinds of amino acids (including 8 essential ones). Furthermore Nopal contains both soluble and insoluble dietary fibers. Research has revealed that Nopal really enhances the efficacy of the immune system, namely by supporting the function of the secretory organs, and additionally it is a natural source of easily digestible proteins and *bioflavonoids*. And this is still not the complete list of the constituents of Nopal, this time we have mentioned only the most important and thoroughly documented ones.

Nopal promotes weight loss and weight control in a natural way, at the same time providing the body with a large scale of nutrients. It temporarily prevents accumulation of fats, boosts their break-down and elimination. Moreover, Nopal enhances mood, while decreasing appetite. Since it increases satiety it prevents the urge of overeating or having snacks. The vegetable proteins of Nopal help the body to "pump back" fluids from the tissues – especially from skin tissues – and return them into lymphatic circulation and blood vessels, diminishing thereby cellulite and fluid retention.

Nopal stabilizes and regulates blood sugar levels (glycaemia) by increasing the insulin sensitivity of peripheral tissues, consequently stimulates the forwarding of glucose from the blood into body cells where it generates energy.

The constituents of Nopal stabilize and regulates both total and "bad" (LDL) cholesterol levels as well as triglyceride blood levels. The latter takes place by breaking down fats and fatty acids and eliminating them through the bile.

A proper diet supplemented with Nopal, along with sufficient physical exercise, results in weight loss, increased energy and a positive change of figure. At the same time with the aid of this program blood sugar and blood lipid levels can be regulated and normalized as well. Therefore Nopal helps effectively reduce the risk of cardio-

vascular diseases. Combined with chromium, its ability of preventing or even removing atherosclerotic plaque from blood vessels is fortified.

Day after day, our body is exposed to toxic material coming from different sources. Many nutritionists recommend a cleansing before we start taking any kind of supplements – vitamins, minerals or herbs. It is most fortunate indeed if a natural supplement that contains compounds effective both in cleansing and nourishing the body is available. Nopal fulfils both tasks.

The dietary fibers in Nopal exert the following favorable physiological, biological and microbiological effects on the gastrointestinal tract: *they slow down the filling up and emptying of the stomach, increase weight, frequency and softness of stools, bind bile acids, reduce the absorption and of glucose from the bowels as well as it binds to carcinogens and heavy metals.* Dietary fibers also promote the activity of “friendly” intestinal bacteria.

In addition Nopal enhances the mineral supply of the body. Vegetable fibers and mucilages in Nopal prevent excess gastric juice production, and at the same time protect the gastrointestinal mucosa.

There are seven routes through which waste products and toxins are eliminated from the body, and when it comes to health and vitality, all of them should be considered. These routes are *the liver, the kidneys, lungs, bowels, skin, blood and the lymphatic system.* The constituents of Nopal, vitamins, minerals, bioflavonoids, fibers etc. of natural origin help detoxify and support not only the functioning of the liver but also the whole body. By removing ammonia, free radicals and environmental toxins such as alcohol and cigarette smoke from the body, Nopal supports the functioning of the immune system. Being a diuretic, enhances the functioning of the urinary bladder as well as the kidneys by neutralizing waste products and toxins produced by the body. Nopal helps cleanse the urinary bladder and the lymphatic system and affects beneficially the functioning of the prostate. Since Nopal possesses a diaphoretic (perspiration stimulating) properties it may also be used as an anti pyretic. The amino acids in Nopal- especially the 8 essential ones – provide an effective and natural source of nutrients which is highly beneficial for vegetarians.

Nopal is an excellent, multipurpose dietary supplement, almost a panacea. It can be considered as a great helper both in maintaining good health as well as enhancing the body’s self-healing power, especially in case of an upset equilibrium.

LECITHIN (*Phosphatidil choline*)

Lecithin is a natural substance (a lipid) whose extraordinary benefits are still not known to many people. Its main constituents are *choline* and *inositol*, two basic stimuli forwarding compounds of great importance. Choline plays a key role in the structure of the so called biological membranes and is often bound to vitamins (it is regarded a member of the vitamin B group). We mean by biological membranes the walls of cells and other structures. From the physiological point of view choline plays a vital role in the membranes of muscle and nerve cells as well as of the membrane of cerebral cells.

Choline and inositol and lecithin derived from them, are equally considered to be fat burners, as well as a bile, liver and blood vessel wall protecting substances. Choline and inositol are *lipotropic and fat burning agents*, by affecting the fatty acids of the body to accelerate natural fat dissolving, and fat burning processes. However, in contrast to standard fat reducing substances, they break down exclusively excess fat.

Lecithin is needed to prevent cholesterol from building up on the inner walls of blood vessels. Since lecithin transforms cholesterol and other fats into water-soluble substances, they can be eliminated from the body with much greater efficiency. As our diet normally contains far more fat than needed, lecithin is indispensable to almost all people. These substances may prevent the formation of a fatty liver. It is a potent stool softening and anti-flatulence substance. Lecithin is vital to our sexual life as well because lecithin and cholesterol (especially the HDL or “protecting” cholesterol particles) are essential for the functioning of the endocrine glands.

L- CARNITINE

According to the latest scientific results L-carnitine counts among the essential nutrients for humans. It is a vital substance for growth, for the development of muscles, for cardiac health as well as for countless other functions. For instance during performing aerobic exercises

the 51% of energy utilization results from fats, while in sports requiring endurance this goes up to 80%. Muscles working continuously or on the long term as myocardium gain energy almost exclusively from burning fat, for this reason they cannot remain functional in lack of carnitine. It has been demonstrated that fat burning process almost entirely depends on carnitine and its functional (tandem) partner, a coenzyme called CoQ10. Carnitine keeps functioning the transporting system that forwards fatty acid molecules into mitochondria, small cell organs “power plants” that can be found in the cytoplasm, which are practically the “energy generators” for cells. Here by oxidation, a universal, life giving substance, the so called adenosine triphosphate (ATP) comes into existence.

Therefore as a really high quality weight loss promoting preparation, – *Slim Formula* contains the amino acid L- carnitine, which is responsible for creating energy by oxidation of the fatty acid molecule, and wasting of the body fat.

CHELATED CHROMIUM as chromium picolinate

The body uses this essential mineral in fat and sugar metabolism. Chromium is found in whole grains, brewer’s yeast, wheat germ, and beef. It is often sold in the form of chromium picolinate, in which the mineral is bound to the picolinic acid in order to increase its absorption and bioavailability.

In order to appreciate how chromium works, we must review how the body controls blood sugar levels. After a meal, the body responds to the rise in blood glucose levels by secreting *insulin*. Insulin lowers blood glucose by increasing the rate by which glucose is taken up by cells throughout the body. Declines in blood glucose, which occur during food deprivation or exercise, cause the release of *glucagon* - another hormone produced by the pancreas. Glucagon stimulates the release of glucose stored in body tissues (especially the liver, and skeletal muscles) as glycogen. If blood sugar levels fall sharply or if a person is angry or frightened, it may result in the release of epinephrine (adrenaline) by the medulla of adrenal glands. On the other hand under continual (chronic) stress conditions, the cortex of the adrenal glands is responding by release of corticosteroids (cortisol). These hormones provide quicker breakdown of stored glucose for extra energy during a crisis or increased need.

In 1957, researchers Walter Mertz and Kenneth Schwartz isolated a compound extracted from pork kidney they called the „glucose tolerance factor (GTF).” This pork substance restored impaired glucose tolerance in rats. Chromium was later identified as the active component of GTF in 1959. We now know chromium supplementation is useful in a number of health conditions, primarily because of its effects on blood sugar and lipid control mechanisms. Glucose Tolerance Factor (GTF), the biologically active form of chromium, potentiates the action of insulin and is required to maintain normal glucose metabolism. Chromium supplementation also improves glucose tolerance (better utilisation of glucose in peripheral tissues, especially in the muscles). Along with full - blown diabetes, elevated serum levels of cholesterol, triglycerides and uric acid, glucose intolerance increases the risk of developing heart disease. According to the data published in *Better Nutrition for Today’s Living (Jan 199; Vol. 53(No1): p12)* GTF is one of the most effective nutrients for weight loss. It inhibits the appetite in two ways: by enhancing the action of insulin, which in turn activates the brain’s satiety centre, and by facilitating the transport of amino acids such as *tryptophan into the brain, decreasing the appetite*. Insufficient available insulin on the cellular level (no matter if it is an absolute deficiency of insulin as in case of Type I diabetes /IDDM) or a relative deficiency as in Type II diabetes /NIDDM/) can result in poorly formed haemoglobin. Haemoglobin is the vital compound contained in red blood cells that carries oxygen to our billions of cells. When GTF is introduced, the haemoglobin normalises, restoring normal delivery of oxygen to the cells, proper cellular respiration and metabolism.

Chromium is also a regulator of cholesterol and triglyceride levels in the serum. Chromium takes part as the milieu factor of enzymes, namely *carnitin-palmitoiltransferase I.*, and *II.*, as well as *carnitin-acilcarnitin-translocase*, which catalyse the process of beta-oxidation of fatty acids, enabling the transport of lipids across the mitochondrial membrane. It also acts as an antioxidant. This substance assumes the role of a metabolic enhancer and „fat burner” in various weight-loss and sports products. Supplements of chromium supposedly affect insulin levels to help the body burn fat more efficiently and to stabilise blood sugar levels. It’s also said to improve muscle strength and endurance.

We have already mentioned insulin and the reduced insulin sensibility in certain overweight people. Insulin is one of the most important hormone which plays an essential role for example in muscle development, body weight control as well as cardiovascular health. Insulin forwards glucose and amino acids necessary for energy production and protein synthesis to cells. Few people know that insulin cannot exert its effect perfectly in absence of chromium neither in carbohydrate metabolism nor in burning and transforming fats into energy. Therefore – *Slim formula* as the most modern product contains chromium as well, in chelated form. Chromium picolinate has clinically tested weight-loss promoting effects, without any harmful side effects.

GARCINIA CAMBOGIA

(std. 50% HCA) *hydroxycitrate*

Food intake basically determines satiety. Appetite is influenced by psychological factors as well. Often happens that we eat rather for social, emotional or commercial (advertisements!) reasons than because we are hungry. We eat if feeling sad, eat when celebrating, eat if we are overburdened with stress. Reducing appetite may be a great help to those wishing to lose weight.

Fortunately there is a substance which is very similar in its chemical structure to citric acid that can be found in citruses, but it scarcely occurs in nature. It is the extract of the fruit *Garcinia Cambogia* indigenous to Thailand and South-India, which is very rich in hydroxycitrate (HCA). It may help even unsuccessful dieters. HCA *reduces appetite* and also *prevents ingested carbohydrates from transforming into fat*. The efficiency of HCA is further enhanced by the fat burning effects of the chromium, which is also included in the *Slim formula*.

The plant itself has been used in India for centuries for pickling pork and fish, its extract as a stomachic. In the traditional medicine of South-Asia it is used to cure cardiac spasm (angina pectoris).

HCA influences or regulates several processes in the body:

– Reducing appetite. According to scientific results HCA restrains appetite, therefore the body does with less food.

– Blocking transformation of carbohydrates into fats. Since HCA blocks the so called *lipogenesis*, it prevents carbohydrates ingested with

food from transforming into fats, so lessens fat deposits in the body.

– It reduces the production of low density (LDL) cholesterol and tryglicerides. HCA, by affecting the process of digestion, blocks cholesterol and fatty acid production.

– Energy levels and glycogen storing. It is proved by experiments that HCA stimulates the transformation of glucose into glycogen in the liver (and in muscles as well). Glycogen is a starch-like substance which transforms into simple sugar according to the demand of the body. Therefore HC may give hope for those whose health has been deteriorated because of problems of glycogen storing ability.

– Thermogenesis. Studies testify that HCA intake enhances the body's own heat production by burning calories, that is less get stored in our body in the form of fat. This effect of HCA is further enhanced by the other thermogenesis stimulating components of – *Slim formula* (green tea, ginger and turmeric.)

AND THE OVERALL END-RESULT?

- Weight loss
- Endurance, liveliness
- Detoxification, elimination of wastes
- Enhanced digestion and intestinal activity
- Better mood, contentment
- Regained self-confidence
- More appealing looks

WHAT IS THE DIFFERENCE BETWEEN SLIM FORMULA AND OTHER FAT BURNING DIETARY SUPPLEMENTS ON SALE?

Let's start from the beginning. *Slim Formula* is a complex weight loss promoting preparation, **whose routine consumption promises success, in case we are ready to change our way of life either**. As experience starts already in gustatory and olfactory organs, the tablets of *Slim Formula*, contrasted with other slimming preparations, have an agreeable smell and taste. The essential oils of the herbal extracts endows the product with good smell and taste. Though this characteristic is not decisive from the point of view of effectiveness, it may be an extra attrac-

tion to be consumed with pleasure. As contrasted with other fat burning preparations, one of the main tasks of Slim Formula is detoxifying and removing waste products, stimulation of digestion and intestinal functions, elimination of fluids, relieving connective tissues of metabolic wastes and boosting metabolism.

SUMMARY

Slim Formula is a dietary supplement stimulating weight loss and helping maintaining ideal weight, which can be an excellent, long-term aid primarily for those who exercise regularly. The ingredients of this complex slimming (weight loss enhancing) formula act synergistically (stimulating each other). They help restore the upset equilibrium of our metabolism, as well as promote the body's ability to transform food into chemical (ATP) and heat-energy. It is up to the effectiveness of the enlisted processes and the persistence of the consumers if the slimming diet will be successful or not.

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