



Your Monthly Update

Dear Colleague

Welcome to the March newsletter from Pure Bio Ltd.

We are in the process of setting dates for forthcoming one-day seminars sponsored by Pure Bio in 2005. Please check the website for updates, on www.purebio.co.uk. We always welcome feedback and suggestions.

We have had a specific request from a practitioner to cover the topic of the vegetarian diet, so that is our focus for this month. Please feel free to submit requests for any topics that would be of clinical benefit to you.

The Vegetarian Diet

The “up” side:

There are many noted and significant advantages of a vegetarian diet to health in general. One of the most significant shifts in the modern Western diet is massive increase in protein and starch, creating a gross tendency towards tissue acidity. This in turn has far reaching effects on constitutional well-being – decreased energy output, altered bowel function, decreased mineral and vitamin absorption potential, dysbiosis . . . A balanced vegetarian diet has a much greater intake of fruit and vegetables, fibre, complex carbohydrates and PUFAs, all of which have obvious health benefits.

It is well established that vegetarians have a much lower risk of developing heart disease. A vegetarian diet has been shown to be effective in reducing cholesterol levels and reducing the risk of atherosclerosis. It is a combination of the absence of red meat with its high fat component and digestive demands, together with a high intake of fibre and complex carbohydrates.

Vegetarians generally have lower blood pressure and lower incidence of hypertension. Whilst dietary levels of sodium do not significantly differ, the vegetarian diet contains more potassium, complex carbohydrate, fibre, calcium, magnesium and vitamin C,

Breast disease is very much linked to the Western diet and associated bowel dysfunction. Women with fewer than three bowel movements per week have 4.5 times greater incidence of fibrocystic breast disease than women with at least one bowel motion per day. This is due to the fact that faecal micro-organisms are capable of re-synthesising oestrogen from previously excreted and detoxified oestrogen. Women on a vegetarian diet excrete two to three times more detoxified oestrogens than women on an omnivorous diet

A vegetarian diet has been shown to be protective against gallstone formation. This is most likely to be due to the increased fibre content of the vegetarian diet. Additionally, animal proteins have been shown to increase the formation of gallstones; whilst vegetable proteins, like soy, were preventive against gallstone formation.

Vegetarian and vegan diets are associated with lower risk of osteoporosis. Although bone mass in vegetarians does not significantly differ from omnivores in the third to fifth decades, there are significant differences in later decades; indicating that the decreased incidence of osteoporosis in vegetarians is not due to increased initial bone mass, but rather decreased bone loss. The most important factor is probably the lowered intake of protein and phosphorus, both of which increase excretion of calcium in the urine.

A vegan diet, excluding all meat, fish, eggs and dairy products has been shown to have significant benefit on asthma sufferers. This is probably due to the removal of arachidonic acid from the diet which in turn decreases leukotrienes production. Leukotrienes are 1,000 times more potent as stimulators of bronchial constriction than histamine.

The “down” side:

However, on the other side of the coin, it is essential to understand the specific dietary needs of a vegetarian, even more so of a vegan.

The human body requires eight essential amino acids, from which all other amino acids can be derived in the presence of various co-factors. These eight amino acids are present in all meat, fish, eggs, poultry, dairy products and soya. Plant foods, however, are low or devoid of one or more essential amino acids, so must be eaten in groups in order to complete the group of eight. Hence the need to combine e.g. rice with beans, bread with peanut butter, lentils with potato, and so on. Furthermore, the amino acids in vegetables are less stable and degrade more easily in the storage and preparation of food; so that the freshness of the food and method of cooking become more critical.

Vegetarians can be quite lazy about using alternative food sources for their amino acid intake, failing to use beans, pulses, peas and lentils, so that it can become quite easy for their protein metabolism to become depleted with consequential detrimental effects on energy levels. If this is the case, a multiple amino acid formula, such as Essential Aminos by PE can be supplemented into the diet.

Another common cause of energy deficiency in vegetarians is iron deficiency. Iron is found not only in meat, fish and eggs, but is also abundant in green leafy vegetables, nuts, cereals and beans. However, vegetable-source iron is much more difficult to absorb than meat-source iron; so that haemoglobin levels in vegetarians will always tend to be slightly lower. It is probably a good policy for vegetarians to supplement iron in an absorbable compound, such as glycinate or picolinate for one to two weeks per month to maintain an adequate level. Iron will only cause constipation if given in an inabsorbable form, such as sulphate.

Vitamin B12 levels can also become low in vegetarians since the vegetarian sources e.g. seaweed, spirulina, tempah, are not common food sources in the Western diet. This is further complicated by the fact that vitamin B12 deficiency is masked by folic acid; and folic acid levels are generally high in the vegetarian diet. A supplement of B12 is therefore probably to be recommended on a cyclical basis of one week on – one week off; or two weeks on – two weeks off.

Vitamin A is found only in animal foods, but can be made from beta-carotene (abundant in many vegetables) in the presence of zinc. It is therefore important that the vegetarian has adequate intake of zinc but, given that this is now the most common mineral deficiency in the Western World, a cyclical supplementation of vitamin A may be considered.

Vitamin B3 and B5 are other common deficiencies in the vegetarian diet as they tend to be in much higher concentrations in meat and fish sources.

It can be quite difficult for vegetarians to get an adequate source of omega 3 oils into their diet if they do not eat fish. Most people are very poorly informed about the difference between good fats and bad fats, exacerbated by poor media understanding and fad diets. Nuts and seeds provide an excellent source of oils and are essential in the vegetarian and vegan diet.

A daily intake of omega 3 oils, in the form of flax seed or vegetable source DHA e.g. Neuromins is to be recommended to all vegetarians and vegans.

Dietary Recommendations

- Ensure a correct combination of protein and carbohydrate sources to complete the range of amino acids.
- Recommend a regular intake of foods naturally high in iron and vitamin B12
- Ensure a high intake of zinc as a food source or in supplement form
- Ensure a daily intake of mixed seeds and nuts for vitamin B3 intake
- Ensure a daily intake of untreated cereal e.g. buckwheat or granary bread for vitamin B5 intake.
- Add a dietary supplement of omega 3 oil e.g. flax seed oil or Neuromins
- Ensure the fruit and vegetables eaten are fresh. Prepare vegetables by breaking rather than cutting wherever possible, and steam in preference to any other mode of cooking. Try to eat some raw vegetables every day with a little bread or rice.

Nutritional Supplement Options

- A combination Essential Amino Acid formula e.g. **Essential Aminos** (PE); **Metaplex** (Thorne)
- Iron in an absorbable form on a cyclical basis e.g. **Iron-C** (PE) or **Iron Picolinate** (Thorne)
- B12 on a cyclical basis e.g. **Methylcobalamin** (PE)
- Vitamin B3 (**Niacin**, Kloesterl, or **Niacitol**, PE) if required
- Vitamin B5 (**Pantethine** PE) if required
- Zinc e.g. **Zinc 30** (PE) or **Zinc Citrate** (PE)
- **Omega 3** oil e.g. Flax Seed Capsules (PE) or Neuromins (PE)
- **Vitamin A** as required

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