

body&soul

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BREAST CANCER VACCINE

Scientists at Ohio's Cleveland Clinic have created a new prototype vaccine to prevent breast cancer, which has been tested successfully on mice. A single vaccination, said the scientists, can prevent breast cancer tumours from forming in mice, and also stymies the growth of existing ones. The vaccine contains a protein found in most breast cancers, but not in healthy women, except during lactation, according to Dr Vincent Tuohy, the study's principal investigator. Tuohy says this allows the vaccine to direct a woman's immune system to target this protein without damaging healthy breast tissue.

Source: www.cnn.com



Grains are rich in vitamin B1 and B6 while tofu is a rich source of Omega 3 fatty acids

PROTEIN FIX

Getting enough protein is tough when you are vegetarian. Here's how to strike the right balance on the diet scales.

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Expert speak

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Being a vegetarian is no cakewalk as the diet often lacks certain proteins and vitamins. Non-vegetarians can easily obtain these from meat, poultry and fish.

"A complete balanced vegetarian diet has no deficiencies if it is well planned," said consulting dietician, Jyoti Lalwani. "But most of the vegetarian diets we calculate in our diet history are relatively low in protein, especially of the first class quality, iron, zinc, vitamin B12, and calcium. A vegan diet, which is devoid of milk and milk products, is deficient of first class protein and vitamin B12 especially," Lalwani added.

Consuming milk and milk products is essential, as there are higher contents of vitamin B12 in these foods.

The ideal vegetarian diet

A pure vegetarian diet can meet all these nutrient requirements and is appropriate for all stages of the life

cycle, including during pregnancy, lactation, infancy, childhood, and adolescence. A vegetarian diet should be inclusive of all food groups like whole grain cereals, pulses, sprouts, dry fruits and nuts, fresh fruits and vegetables, oil, ghee, and milk or its products. Meat products contain additional vitamins and minerals. These may include vitamin B1 (thiamine), vitamin B2 (riboflavin), vitamin B6, vitamin B12, Niacin, and Iron.

Meat substitutes

In fact, most meat substitutes are made from either soy protein, wheat protein (wheat gluten) or a combination of the two.

Soy protein has been shown to be equal to proteins of animal origin. It can even be the sole protein source. Iron deficiency is a common problem faced by most vegetarians and meat substitutes are essential to obtain the right amount of proteins.

Proteins are used to make the body's building blocks, called amino acids for the blood, skin, cartilage, muscles and bones, hormones and

enzymes. Milk and soybeans provide all the 9 essential amino acids.

"Whey is the best source of protein for both vegetarians and non-vegetarians, since it has the right proportion of amino acids," said Munira Jawabwala Kawad, who is in charge of training and sports nutrition, Gold's Gym. However, vegetarians do not need to rely on supplements like whey unless their diet is low on proteins.

Vegetarian diet tips

Here's what you can eat to ensure your diet has the right quantity of proteins:

- Besides brewers and nutritional yeast, good sources of vitamin B1 include legumes, whole grains, unrefined cereals, rice bran, seeds (sesame, sunflower), and peanuts. Other sources are figs, oranges, pineapples, watermelon, potatoes and peas.
- Vitamin B6 acts as a catalyst for the body's chemical reactions. It is

present in complex carbohydrates like whole grains, most vegetables, nuts, pulses, and seeds.

- Soymilk and cereals help treat a vitamin D deficiency.

- Cereals, nutritional yeast and soymilk, or soy analogues, provide vitamin B12.

- Flaxseeds, canola oil, tofu, soybeans, soymilk and walnuts are rich in Omega 3 fatty acids, found in fish.

- Vitamin C-rich fruits enable easy absorption of iron and must be included in large portions.

- Dried beans, spinach, brewer's yeast and dried fruits are all good plant sources of iron.

- The best sources of niacin or vitamin B3 are raw crimini mushrooms, asparagus, and collard greens. Other niacin-rich vegetables include mustard greens, carrots and raw tomatoes.

- Vegetable greens such as spinach, kale (a form of cabbage that is either green or red) and broccoli; and some legumes and soybean products, are good sources of calcium from plants.

TUESDAY

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FRIDAY

48hours

SATURDAY

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