

Tasty biscuits to replace iron pills

By Vandana Kamath, Bangalore Mirror Bureau | Dec 7, 2014, 08.49 AM IST

HERE ARE SOME OF THE TOP 5 FOOD SOURCES OF IRON

Include them in your diet to increase your iron stores

- 1** Sardines, Pacific, canned in tomato sauce, drained solids with bone
3 sardines, 114g
2.62g Iron - 17.7% RNI*
- 2** Beef, top sirloin steak, separable lean and fat, trimmed to 1/8" fat, raw
6 oz, 170g
2.52g Iron - 17% RNI*
- 3** Lamb, leg, sirloin half, trimmed to 1/4" fat, raw
1 steak, 150g
2.42g Iron - 16.4% RNI*
- 4** Chickpeas / Garbanzo beans, cooked, boiled, without salt
1/2 cup, 82g
2.37g Iron - 16% RNI*
- 5** Prunes, dehydrated (low-moisture), uncooked
1/2 cup, 66g
2.32g Iron - 15.7% RNI*

Most pregnant women complain about the bad taste of iron tablets and the side effects that they cause. The adherence level of consuming these tablets is very low most times, resulting in many not taking the right dosage. This causes a high rate of maternal and neonatal deaths.

To beat this challenge, nutritionists at St John's Hospital are in the process of developing a biscuit that will replace these tablets. They are concentrating on making a food-based product that tastes good, has a nice flavour and increases absorption.

Pratibha Dwarkanath, nutrition lecturer at St John's Research Institute is heading the \$2,70,000 project that is funded with Development Innovation Fund by Grand Challenges Canada through the Canadian government. About 14 contestants had applied for this challenge last year.

Dr Dwarkanath said, "We have set up a cohort of pregnant women at St John's Hospital and have decided to bake these biscuits that will have iron content as there is in pills. This was decided in the backdrop of increasing cases of anaemia in pregnant women, which affects the health of their children. This also leads to several complications in the child such as impaired psychomotor development and certain cognitive disabilities." The research project is carried out under the aegis of Dr AV Kurpad, Head, Department of Nutritionists, and New York based Violet Health Sciences. Right now the biscuits are being tested for bioavailability after which they will be tested on two groups of women.

"After the results of the bioavailability tests are out, we will test them on pregnant women. One group will be given placebo biscuits and the other these iron biscuits. After a specific interval of time, their haemoglobin levels will be tested to check the efficacy level of these biscuits," Dr Dwarkanath explained.

The institute had applied to Grand Challenges last year, which had the theme of Saving Brains that encourages bold ideas to improve global health. The grant was approved after the institute proposed this idea and decided to take up the project.

"Tackling anaemia is a big challenge in the Indian scenario where about 17 million people are given iron pills, yet 11 million do not take them and the adherence level is as low as 35 per cent. The pill is big and tastes metallic. They are generally given as supplements during pregnancy.

Aggressive marketing of the biscuit is likely to lead to its being used by previously non-adherent pregnant women resulting in increased iron store in newborns," Dr Dwarkanath added.