



ISSN: 0976-3376

Available Online at <http://www.journalajst.com>

ASIAN JOURNAL OF
SCIENCE AND TECHNOLOGY

Asian Journal of Science and Technology
Vol. 09, Issue, 10, pp.8936-8938, October, 2018

RESEARCH ARTICLE

DEVELOPMENT OF VALUE ADDED ANAEMIC SOUP POWDER AND ITS BENEFICIAL EFFECT

*Ankita and Mishra Sunita

Department of food and Nutrition, School of Home Science, Babasaheb Bhimrao Ambedkar University (Central University),
Vidhya Vihar, Raebareli Road Lucknow – 226025 Uttar Pradesh, India

ARTICLE INFO

Article History:

Received 10th July, 2018
Received in revised form
18th August, 2018
Accepted 14th September, 2018
Published online 30th October, 2018

Key words:

Development of Anaemic Soup
Powder, Rich of Iron,
Protein, Carbohydrates,
Fibber & etc. Health Beneficial for
Anaemic Person.

ABSTRACT

Anaemia is condition characterized as a low level of haemoglobin in the blood, as evidenced by a reduced quality of red blood cell which decreases oxygen-carrying capacity to tissues. The whole idea of development of Value Added Anaemic Soup Powder rich in iron .Which include Beetroot, Tomato, Carrot, Pea, Ragi Flour, Corn Flour. This product in rich fiber content, iron, protein, carbohydrate etc. This processed product is beneficial for anaemic patient. 15gm Value Added Anaemic Soup Powder and mix it one bowl boiled water. Take this regularly meal. The main objective of the study to know the Value Added Anaemic Soup Powder it's beneficial effect.

Citation: Ankita and Mishra Sunita, 2018. "Development of value added anaemic soup powder and its beneficial effect", *Asian Journal of Science and Technology*, 09, (10), 8936-8938.

Copyright © 2018, Ankita and Mishra Sunita. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Value added anaemic soup powder is very beneficial for health because it contain large amount of nutrients. Out of these nutrients it largely contains iron along with some other major nutrients such as- protein, fibber, carbohydrate, vitamins, minerals and etc. Since it contain large amount of iron which are main component of blood there far it is more beneficial for women, mostly for adolescent girls and pregnant women's, in compare to man. Anaemia is a condition characterize as a low level of haemoglobin in the blood, as evidenced by a reduced quality or quality of red blood cells decreases oxygen- carrying capacity to tissues (Freire, 2003). Anaemia may be diagnosed with confidence when the haemoglobin concentration is lower than the level of considered normal for the person's age / sex group. When the anaemia is due to iron deficiency, increasing the person's intake of absorption iron will raise the haemoglobin concentration (Baker, 1979). The red blood cell in the body of an anaemic person destroyed from that no proper supply of oxygen take place in your body. Our boy undergo suffered from various problems such as weakness, fatigue, heart failure, jaundice, pallor, koilonychias, hyperdynamic circulation & etc. To overcome such problems value added anaemic soup powder are very helpful.

*Corresponding author: Ankita,

Department of food and Nutrition, School of Home Science, Babasaheb Bhimrao Ambedkar University (Central University), Vidhya Vihar, Raebareli Road Lucknow – 226025 Uttar Pradesh, India.

Tomato: Tomatoes are also rich in beta carotene and vitamins E and hence help in natural conditioning of the hair and skin. Vitamin C is the main ingredient in tomatoes along with lycopene. The vitamin C in tomatoes helps in easy absorption of iron.

Beetroot: Beetroot is known to be very effective in fighting anaemia. Adding beet-root in any form in your daily diet will help to easily fight anaemia. Beetroot supplementation might serve as a useful strategy to strengthen endogenous antioxidant deference, helping to protect cellular components from oxidative damage (Kannan, 2000). Beetroot is known to be very effective in fighting anaemia. It is a vegetable that is filled with iron content. It will help in repairing and reactivating your red blood cells. Once the red blood cells are activated, the supply of oxygen to all parts of the body increases. Adding beet-root in any form in your daily diet will help to easily fight anaemia.

Ragi: Natural iron is an excellent component found in ragi. Iron deficiency causes anaemia. People with anaemia get benefitted if they can include ragi in their regular diet. Rich in amino acids, essential nutrients, proteins, and minerals, and also high in fibber and low in fat, ragi can be included as a part of your staple diet. Ragi is the important staple food in the eastern and central Africa as well as some part of India. It is rich of Protein, Iron, Calcium, Phosphorus, Fibber and Vitamin content. The Calcium content is higher than all

cereals & iodine content is said to be highest among the food grains. Ragi has best quality of protein along with the presence of essential amino acids, Vitamin A, Vitamin B, & Phosphorus. Thus ragi is good source of diet for growing children, expecting women's old age people and patients (Majumder *et al.*, 2006)

Corn flour: Corn helps prevent anaemia caused by a deficiency of these vitamins. It also has a significant level of iron, which is one of the essential minerals needed to form new red blood cells; a deficiency of iron is one of the main causes of anaemia as well.

Carrot: The mixture of carrot and beetroot is rich in vitamin A and iron, both these compounds are essential for the production healthy red blood cells and haemoglobin. When there is a healthy production of red blood cells in your body, blood-related disorders like anaemia can be kept at bay. The molecular structure of carrot is very similar your haemoglobin molecules rendering it effective for producing and maintaining health level of this vital element in your blood

Peas: Green peas have a valuable content of nutrients. Despite their small size they contain significant amounts of vitamins and minerals necessary for the body. Green peas help reduce cholesterol levels in the blood. They have a large amount of iron and antioxidants that help to strengthen the immune system and reduce the risk of various forms of cancer. Green pea good source of iron. 1 cup green pea present in 2.12mg iron.

Objective

1. The nutritional properties of Value Added Anaemic Soup Powder
2. To know the dose of awareness among the population about the use of Value Added Anaemic Soup Powder

Development of value added anaemic soup powder



Table 1. Value added soup nutritional value (per 100gm)

Nutritional value	Value addea soup
	Result
Protein %	9.36
Iron %	330
Fat%	0.64
Total energy %	337
Carbohydrate %	73.52
Moisture%	11.64

Source-RFRAC, Luckow.

Use of anaemic soup powder

The whole idea of development of Value Added Anaemic Soup Powder rich in iron. Which include beetroot, tomato, carrot, pea, ragi flour, corn flour. This product is rich fiber content, iron, protein, carbohydrate etc. This processed product is beneficial for anaemic patient. The developed Value Added Anaemic Soup Powder is also used by added 15gm of its powder in small bowl warm water with salt and lemon. If with think fit than we can also use vegetables with them. It has to use daily. Its use is very beneficial for anaemic person and also for other person, they can normally use. It is very beneficial for anaemic person because it containing large amount of iron. The Value Added Anaemic Soup Powder increases haemoglobin that improves blood level in our body. Value Added Anaemic Soup Powder is very beneficial for health because it contain large amount of nutrients. Since it contain large amount of iron which are main component of blood there far it is more beneficial for women, mostly for adolescent girls and pregnant women's, in compare to man.

Beneficial Effect

The red blood cell in the body of an anaemic person destroyed from that no proper supply of oxygen take place in your body. Our boy undergo suffered from various problems such as weakness, fatigue, heart failure, jaundice, pallor, koilonychias, hyperdynamic circulation & etc. To overcome such problems Value Added Anaemic Soup Powder are very helpful. During the period of adolescent girls and at time of pregnancy, in both the situation loss of blood take place through body. Due to blood loss through body, blood deficit take place in blood & also body become weak. Value Added Anaemic Soup Powder is very beneficial and also helpful to fulfil such as blood deficiency in body.

Conclusion

It is a good preventative for maintaining good health. It is formed by mixing six ingredients (Tomato, Beetroot, Carrot, Corn flour, Ragi & Pea) which contain proper amount of Iron, Carbohydrate, Fibre, Vitamins, Protein & etc. Nutrient. These nutrients are beneficial for anaemic patient & also helpful to prevent diseases like cancer, cardiovascular, blood pressure, skin problem & etc. Tomato have high amount of special nutrients. Tomato is an outstanding source of the antioxidant, lycopene which has shown to lower the risk of cardiovascular disease. Beetroot is good source of iron and other nutrients manganese, copper, potassium & magnesium. Beetroot also help improve blood flow cell signalling, and hormones all of the play role in increasing the energy level. Beetroot source of dietary nitrate for managing cardiovascular health.

REFERENCES

- Baker, S.J. and De Maeyer, E.M. 1979. Nutritional anemia: its understanding and control with special reference to the work of the World Health Organization. *American journal of Clinical Nutrition*, 32:368-417.
- DeMaeyer, E. and Adiels-Tegman, M. 1985. The prevalence of anaemia in the world. *World health statistics quarterly*, 38:302-316.
- Freire WB, Kahn SG, McGuire J, Post GL. 2003. Anemia Prevention and Control. What Works Part I: Program Guidance. U.S. Agency for International Development.
- Garby, L. et al. 1969. Iron deficiency in women of fertile age in a Swedish community. 111. Estimation of prevalence based on response to iron supplementation. *Acta medica scandinavica*, n185: 113-117.
- Garby, L. 1970. The normal haemoglobin level. *British Journal of Haematology*, 19:429-434.
- Lundberg J.O., Weitzberg E., Gladwin M.T. 2008. The nitrate-nitrite-nitric oxide pathway in physiology and therapeutics. *Nat. Rev.*, 7:156-167. [PubMed]
- Lynch, S. R. 2000. The potential impact of iron supplementation during adolescence on iron status in pregnancy. *Journal of Nutrition*, 130(S2 Suppl), 448S-451S. Pub Med Google Scholar.
- Majumder, T.K., K.S. Premavalli and A.S. Bawa, 2006. "Effect of puffing on calcium and iron contents of ragi varieties and their utilization", *Journal of Food Science and Technology*, 42 (5), 542-545.
- Reddy M.K., Alexander-Lindo R.L., Nair M.G. 2005. Relative inhibition of lipid peroxidation, cyclooxygenase enzymes, and human tumor cell proliferation by natural food colors. *J. Agric. Food Chem.*, 53:9268-9273. doi: 10.1021/jf051399j. [PubMed] [Cross Ref]
- Tesoriere L., Fazzari M., Angileri F., Gentile C., Livrea M.A. 2008. *In vitro digestion* of betalainic foods. Stability and bioaccessibility of betaxanthins and betacyanins and antioxidative potential of food digesta. *J. Agric. Food. Chem.*, 56:10487-10492. doi:10.1021/jf8017172. [PubMed] [Cross Ref]
- WHO Technical Report Series, No. 580, 1975 (Control of nutritional anaemia with special reference to iron deficiency: report of an IAEA/USAID/WHO Joint Meeting).
- Wootton-Beard P.C., Ryan L. 2011. A beetroot juice shot is a significant and convenient source of bioaccessible antioxidants. *J. Funct. Foods*, 3:329-334. doi: 10.1016/j.jff.2011.05.007. [Cross Ref]
- World health organization. Iron deficiency anaemia: assessment, prevention and control. A guide for programme managers. Geneva, 2001 (WHO/NHD/01.3).
- World health organization. Worldwide prevalence of anemia 1993±2005. WHO Global Database on Anemia. Geneva: World health organization; 2008
