Consciously selecting higher fibre foods during Ramadan could help to:

- **Improve digestive health**

  Wheat bran fibre contributes to an acceleration of intestinal transit and an increase in faecal bulk, and therefore helps to prevent and relieve constipation. In order to combat constipation during fasting, guidance is to ‘drink more water, eat bran, brown wheat, and more vegetables and fruit’. Research has shown that for most people eating a wheat bran rich breakfast cereal is effective in alleviating the symptoms of constipation and digestive discomfort within 3 days.

- **Limit hunger**

  Fibre helps to reduce appetite and short term food intake. Health guidelines for fasting encourage high fibre foods, such as those with bran or wholewheat at Suhur.

It is also important to encourage adequate fluid intake at Iftar, as well as during the period between Iftar and bedtime to help minimise risk of dehydration.

**Dietary Guidelines for the region** recommend eating a selection of fortified grain foods to improve micronutrient intake. Choosing a fortified breakfast cereal, which is also rich in wheat bran fibre, will help to maintain adequate intakes of vitamins, minerals as well as provide a welcome boost to fibre intake during periods of fasting.

Although fasting is a time of spiritual growth, it can also be used as an opportunity to improve physical health. Many Muslims change their lifestyle, sleep hours, physical activity, food consumption, meal frequencies and dietary habits during Ramadan. Side effects of fasting are limited to many however, but some side effects could be easily avoided, or at least reduced, by making positive dietary choices. Taking simple conscious steps to increase intake of dietary fibre, especially wheat bran fibre, combined with a sufficient fluid intake could ease the digestive ill health commonly experienced as a consequence of fasting. As fibre intakes are generally believed to be inadequate for good digestive health, consumption of wheat bran rich foods should be encouraged both during Ramadan and beyond.

Fasting during the holy month of Ramadan involves changes in eating patterns and meal timings, which may challenge the regular function of the digestive tract. It is generally acknowledged that unpleasant side effects are commonplace during Ramadan due to the disruption in eating habits, however there is little data on the prevalence and severity of these symptoms. One common problem reported during Ramadan is poor digestive health accompanied by an increase in the occurrence of constipation. Choosing foods rich in wheat bran fibre is a simple, effective approach that could bring significant improvement to digestive function of the digestive tract.

**Impact of fasting on fibre intakes**

Fibre intakes are often inadequate in the diets of people living in the Arab Gulf. For example, in KSA, average adult fibre intakes have been reported between 11g-14g/day (less than 50% of the optimal intake recommended for good health) in the USA, more than seven out of ten children and adolescents consume less fibre than recommended. In Kuwait, one in three adults and just one in five children consume the recommended intake of fibre. Low fibre intakes have been reported in both children and adults in Bahrain.

Fasting during Ramadan is likely to reduce fibre intake even further, due to changes in the timing of foods consumed. For instance, consumption of special festival foods that are richer in fats and sugars, and sugary soft drinks is common. This can result in an increase in fat intake and a shift from complex fibre containing carbohydrates (cereal, vegetables, beans) to foods higher in simple sugars (sweets and sweetened drinks). It is therefore reasonable to assume that fibre intakes fall accordingly with this change in diet. In addition to lower fibre intakes, the risk of dehydration also increases. Low fluid intakes are known to be a contributing factor to the problem of constipation. Maintaining adequate hydration is more challenging in hot climates due to increased evaporation and fluid loss from the skin.

Overall, poor digestive health during Ramadan is likely to be due to a combination of different factors. These include: poor fibre intake, dehydration (very common side effect of fasting); physiological changes to gut motility as a consequence of fasting; increased evaporation and fluid loss from the skin. It is also important to encourage adequate fluid intake at Iftar, as well as during the period between Iftar and bedtime to help minimise risk of dehydration.