Dietary Advice and Syncope Symptoms

Syncope is characterized as a transient loss of consciousness and muscle strength as a result of an acute drop in blood pressure. It occurs relatively quickly, lasts a short period of time and individuals tend to recover soon after an episode. On a population basis it is estimated to affect 1 in 3 people. ‘Functional foods’ is commonly used to refer to foods or the ingredients in foods that can be used on a day-to-day basis to manage the symptoms of certain diseases. The aim of this article is to outline some of the dietary interventions, both in terms of food and fluids intake that may be helpful in managing the symptoms of syncope.

It is a modern day mystery that even though 30% of people have experienced a fainting episode (‘syncope’) at one point in their life, its cause still remains unclear. Fainting is defined as the “…transient loss of consciousness caused by insufficient blood flow to the brain characterized by a rapid onset, short duration, and spontaneous and complete recovery” [1]. The three most common causes of syncope include orthostatic hypotension, a reflex response to a stimulus (i.e., the loss of blood) or an underlying cardiovascular disease or condition, which has been discussed in an article published in SciTech Connect and entitled ‘Syncope, Synkope, S\textsuperscript{i}ŋkəpi: Swooning Explained’ [2].

Guidance from the STARS (syncope trust and reflex anoxic seizures)

In January 2012 the STARS [3] published an article entitled ‘You are what you eat – a guide to healthy eating for patients with vasovagal syncope and postural tachycardia syndrome (PoTS).’ The information published is intended for patients and carers of patients suffering with syncope or PoTS and focused on both fluids and foods to help manage and avoid the symptoms of syncope.

STARS advice on fluid intake

The general advice for fluid balance is to increase fluid intake prior to and following exercise as well as on hot days, and to avoid the intake of alcohol. Patients should consider drinking sports drinks to rehydrate and to also increase the intake of electrolytes and glucose. And, to even consider caffeine drinks such as coffee, tea and coca cola drinks. The explanation being that caffeine leads to a small and acute rise in blood pressure, which counteracts the small decreases in arterial pressure seen during a fainting episode. A similar effect can also be gained from drinking two glasses of water. This leads to a small ‘pressor effect’, which is thought to be triggered by the stretching of sympathetic nerve fibre endings in the stomach and thus leading to a small rise in arterial blood pressure.

STARS advice on food intake

The advice in terms of foods included the intake of salt, low gastro-intestinal (GI) foods, diets that have a high fibre content and foods with high potassium content. Salt is advised as syncope patients tend to have low arterial pressure and salt is taken to increase arterial blood pressure.

Low GI diets are advised as: “Many patients with PoTS experience deterioration in their symptoms after meals. This is because blood is diverted to the splanchic blood vessels which supply the organs in the abdomen in an effort to digest food. Meals rich in refined carbohydrate (e.g. sugars and white flour) worsen this problem.”

Foods with a low GI will release sugar at as a slower rate and this reduces its plasma peak levels as well as prolonging its delivery. Examples include bran or oat breakfast cereal, nuts, yoghurt, beans, fruit and vegetables, brown rice, pasta and wholegrain bread.

Fibre-rich diets are advised, primarily to avoid the constipation associated with syncope. This should also be accompanied by an
increase in water intake avoid constipation, which can exacerbate the symptoms of syncope. High fibre diets include foods such as bran cereal, fresh and dried fruits, vegetables, beans and lentils, wholemeal bread, brown rice and pasta. Lastly, patients taking medicines to manage their symptoms should consider taking additional supplements. For example, patients taking fludrocortisone for vasovagal syncope and PoTS may be prone to losing potassium through excretion and having low levels of potassium and undesirable effects include syncopal episodes [4]. Foods with a high potassium content and that can be ingested to counteract this include bananas, avocados, dates, beans and lentils, spinach, mushrooms, melon and dried fruits.

Conclusions

Syncope leads to a transient loss of consciousness and muscle strength, and affects around 1 in 3 people. Its effects are generally sudden and short-lived. Syncope occurs when arterial blood pressure drops (i.e., orthostatic hypotension), drops in response to a reflex (i.e., fear of needles or blood) or drops in response to an underlying cardiovascular disease or condition. Diet is one area that may help to alleviate the number of episodes or the extent of the symptoms experienced. In terms of fluids, caffeine, water and sports / electrolyte enriched drinks may be helpful to counteract reduced arterial pressure and to rehydrate. Foods that may be helpful include salt, low GI carbohydrates, high fibre foods and foods rich in potassium. Patients suffering with syncope should consider dietary strategies to manage their symptoms, which may also have other benefits such as improved quality of life as a result of reduced frequency of syncope events and reduced duration of syncope events.

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References

Fainting (syncope, passing out) can be caused by a variety of situations, for example, pregnancy, medications, diabetes, anemia, heart conditions, age, and electrolyte imbalances. The person who has fainted doesn’t know that they have passed out. Signs and symptoms of fainting include weak, lightheaded, sweaty, vertigo, and hearing sensations. Treatment for fainting depends on the cause. Often a person will have signs or symptoms prior to the fainting episode. Diagnosis and treatment depends upon the cause of the fainting or syncope episode. Read more: Fainting (Syncope) Symptoms, Causes, Treatment, and Prevention Article. Multimedia: Slideshows, Images & Quizzes.


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