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Prescribing...

Nutritional Supplements

- Malnutrition is proven to be associated with impaired immunity, increased risk of infection, skin breakdown and reduced functional capacity.
- Appropriate use of nutritional supplements can help to reverse weight loss and reduce the morbidity associated with malnutrition.
- The decision to start a supplement must be based on clear clinical criteria.
- Supplement use is expensive, but easy, and is becoming increasingly widespread in the community.
- There is emerging evidence that patients (and their carers) become reliant on supplements, take supplements unsuitable for their condition or continue to receive bulk prescriptions for products they no longer need or like!

What are the appropriate criteria for prescribing sip feeds?
A recognised assessment tool such as the HSSD tool or UK MUST tool should ideally be used to establish the need for prescribed nutritional intervention. The criteria are as follows

1. BMI < 20 (The most reliable indicator of nutritional status)
2. Weight loss of > 10% in the preceding 3 months
3. High score on a nutritional assessment tool. (This is a less objective tool than 1 and 2)

Ideally all patients considered to be underweight or at high risk should be referred to a dietician as the first line treatment and should be advised on appropriate dietary modification. Inappropriate use of supplements may lead to excessive weight gain, hyperglycaemia, hyperkalaemia or other metabolic abnormalities. It is also vitally important that supplement use is regularly monitored and that they are stopped when they are no longer needed.

Which feed?

1. Complete feeds e.g. Ensure Plus (including yogurt-style) , Fortisip and Fortifresh

These products contain a full range of macro and micronutrients in quantities proportionate to the energy content of the feed. This means that if a patient cannot tolerate an oral diet s/he can still achieve an adequate intake of all nutrients by consumption of the sip feed alone. They are suitable for most underweight individuals, including diabetics.

2. Complete feeds with added fibre e.g. Enrich Plus and Fortisip Multifibre

Soluble fibre has a beneficial effect on colonic function (through the formation of short-chain fatty acids). Fibre is also effective in increasing faecal softness and bulk and in decreasing gut transit time. These feeds are the first-line choice for underweight diabetics and patients with a history of constipation.

3. Incomplete feeds

- **Fat-free e.g. Enlive and Fortijuce**

These fat-free feeds are presented as a juice-like drink and are suitable for most underweight individuals who do not like milky drinks (NB they are not milk protein free). Because they lack essential fatty acids, they should **not** be used as the sole source of nutrition. The high sugar content makes them unsuitable for diabetics.

- **Fat-free milk-free e.g. Provide Extra** are suitable for those with milk allergies.
- **Modified texture incomplete feeds e.g. Forticreme**

These products are thickened to a consistency that is safe for use by patients with swallowing difficulties. However, their low sodium and micronutrient balance are unsuitable as the sole source of nutrition.

- **High energy or high protein unbalanced feeds e.g. Scandishake and Fortimel**

A dietitian must be involved in the prescribing of these products as they are not nutritionally complete and may well lead to other nutritional problems if they are used inappropriately.

N.B. The Prescribing Support Unit has received a number of disturbing reports that Scandishakes are being requested on States Prescriptions by young men for use as part of body building programmes. There have also been reports of an illicit drug user who is requesting cartons of feeds for use when he is consuming too many street drugs. Primary Care doctors are strongly urged to resist these demands.

When should sip feeds be stopped ?

A return to a normal oral diet should be the ultimate goal of treatment of underweight individuals. It is important that patients, or their carers, do not become dependant upon sip feeds and lose their confidence or interest in eating. A recent study in Wigan found that 10% of patients become emotionally dependant on sip feeds and a significant number became overweight. Therefore, regular monitoring of nutritional status, medical condition and appetite is vital.

For the majority of patients in the community, the use of sip feeds should be a short-term measure until a normal appetite is restored. The decision to stop should be based on objective criteria such as a BMI of > 20, weight regain of > 10% and the restoration of a good appetite. Individuals with chronic disease states such as some cancers, COPD, CRF and dementia often remain nutritionally vulnerable. Regular monitoring of weight and intake is a particularly important part of their care. Repeated courses of sip feeds may be indicated under these circumstances, but every effort should be made to return the client to a normal diet. Family members or carers concerned about the appropriateness of stopping feeds should be reassured that supplements can be restarted if/when they are required.

What is the latest information on prescribing of Micronutrient Supplements?

The Food Standard Agency produced a document on the relative health benefits and potential benefits of prescribing micronutrient supplements. It is available on the following web address: - www.food.gov.uk/science/ouradvisors/vitandmin/evmreport.

Healthy individuals following a reasonably healthy and varied diet should have no need for additional prescribed micronutrient supplements. In the case of more nutritionally vulnerable populations such as the frail elderly, micronutrient deficiency may be suspected. The first line of treatment should be to rectify protein-energy deficits. Increased energy intake (provided it is derived from a balanced diet) will automatically increase micronutrient intake.

Prescription of single or partial micronutrient supplements is not advisable, unless a specific deficiency has been identified. Even then it should be undertaken with caution, as the use of high dose supplements may interfere with the normal absorption of other nutrients. The use of a one-a-day complete multivitamin and mineral complex (e.g Forceval) is generally the safest short term option. It may be contraindicated if the patient consumes liver on a regular basis or also consumes fish oil supplements containing vitamin A. A recent Scientific Advisory Committee on Nutrition (SACN) review indicates that long-term vitamin A consumption slightly over the RDA may increase the risk of osteoporosis in those already predisposed (www.sacn.gov.uk/pdfs/sacn-vita-report.pdf). High vitamin A intake may also lead to liver toxicity and failure. Patients should generally be discouraged from taking any vitamin A-containing preparations. If a complete micronutrient preparation is prescribed use should be reviewed regularly and the supplement stopped once the deficiency has been corrected.

Ascorbic acid and zinc are sometimes prescribed to patients with pressure sores or poor wound healing. There is no evidence that supplementation with either promotes healing, unless there is a clinically defined deficiency.

Calcium and Vitamin D supplementation at appropriate doses is one useful option in the prevention of osteoporosis in the frail elderly resident in nursing and residential homes. Hip protectors are also extremely useful in preventing hip fractures.

In summary

- **A return to a normal oral diet should be the ultimate goal of treatment with any sip feed.**
- **It is important to prevent the client and/ or his carers becoming emotionally and physiologically dependant on feeds.**
- **All feeds should be regularly reviewed, with concordance checked at every opportunity.**
- **Complete feeds should be stopped once the BMI has exceeded 20 and/or the patient has regained 10% or more of his/her body weight.**
- **Requests by body builders for nutritional products on states prescriptions should be flatly refused.**

The contents of this bulletin were approved by Dr. Lynn Harbottle, Consultant in Nutrition to the HSSD.

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