ADDITIONAL ISSUES ASSOCIATED WITH MENSTRUATION / AMENORRHOEA INCLUDE:

>22% body fat is required for regular menstruation to occur. A drop of 10-15% weight from an ideal body weight will result in a drop below 22% body fat and is likely to affect menstrual function. However, ovulation and pregnancy can still occur without menstruation & clients should be advised of this.

Amenorrhoea in anorexia nervosa occurs due to hypothalamic mediated hypogonadotrophic hypogonadism (suppressed secretion of FSH and LH with secondary low ovarian oestrogen).

Although primarily considered a manifestation of low weight or malnutrition, it can occur following a prolonged period of weight loss or erratic eating behaviour, even while still at a 'normal' weight, and also as a response to prolonged intensive exercise as occurs in the Female Athlete Triad (a syndrome of disordered eating, amenorrhoea and osteoporosis).

Amenorrhoea and oligomenorrhoea can also occur in up to 30% of patients with bulimia nervosa (including patients of a normal weight).

Persistence of amenorrhoea > 6 months is associated with lowered bone mineral density. Prescription of the Oral Contraceptive Pill (other than for contraception) to mimic 'normal' menstruation is not indicated.

Menses usually return upon achieving satisfactory weight gain, although regular menses may be delayed for up to 12 months. There is individual variation in the weight required for resolution of hypogonadism and resumption of menses.

A weight gain to at least 90% of Ideal Body Weight (IBW- the 50th centile for height and age) is associated with resumption of menses in about 90 percent of patients within 6 months. Some patients will achieve normal gonadal function at lower weight. Patients who engage in intensive exercise and/or ongoing disordered eating behaviour may need to maintain a higher weight for menstrual recovery.

Menstruation may not return at any time if severe stress or other factors that can cause amenorrhoea occur¹.

Measure FSH, LH and oestradiol and/or pelvic ultrasound for objective evidence of recovery. In premenarchal children, progression of pubertal breast and genital development as well as normal growth indicate functional recovery. The presence of pubic or axillary hair alone may reflect adrenal function and is not a reliable indicator of gonadal function.

Polycystic ovary syndrome is a common cause of irregular or absent menses in adolescents and young women and can co-occur with an eating disorder. In amenorrhoea secondary to polycystic ovary syndrome alone, oestradiol and FSH is usually normal and LH may be normal or elevated with an LH:FSH ratio > 2:1. Note that Ultrasound features of polycystic ovaries is often absent, especially in young patients and is not required for the diagnosis.