

## English synthesis

Fitness sports frequently show models of thinness that are very normative. The question asked by this study is to know whether the prevalence of eating disorders is high among those practising and if the engagement in these sports is an influence on these eating disorders. This research study is based on a sample of 1270 women practising fitness sports in Switzerland aged 14 to 30 years old ( $M=23.7$ ,  $SD=3.0$ ), who were asked by questionnaire and on 45 interviews with 40 women and 5 men from 15 to 40 years old ( $M=24.3$ ,  $SD=5.4$ ).

Three indicators were used in order to comprehend the eating disorders by questionnaire: the EAT-26 scale, the body mass index (BMI) and the use of weight-loss methods (dieting, fasting, provoked vomiting, laxatives, diuretics, appetite suppressants). The results show that:

- the prevalence of eating disorders among those practising fitness sports is 10.31% (EAT-26 score  $\geq 20$ );
- eating disorders are more frequent among women with too low a weight, or too high in relation with their height;
- the use of weight-loss methods (dieting, fasting, provoked vomiting, laxatives, diuretics, appetite suppressants) is linked to eating disorders. The same is true for the length of use of these methods.

### I. Links Between Fitness Sports and Eating Disorders (ED)

- the prevalence of eating disorders is higher in private fitness clubs than in other sites (optional university sport, associations or sports clubs, etc.);
- women with eating disorders (EAT-26 score  $\geq 20$ ) are mainly concentrated in the fitness sports with the highest-energy level spent (cardiovascular group classes in fitness gyms, but especially running, biking or swimming);
- the quantity or frequency of fitness sports practice are generally higher among women who have anorexia or who are in a restrictive eating phase;
- among the women practising fitness sports, eating disorders are associated with an addiction to sport, bone problems (fractures, osteoporosis) and irregular menstrual cycles.

### II. Dominant Extrinsic Motivations

The motivations of those practising are linked to physical, psychological and/or social health, (64.2%) and with weight-loss / change in body appearance (13.8%). The higher the weight-loss is, the more important the eating disorders are (EAT-26 score). 13.4% of girls without ED say that they are primarily motivated in fitness sports by weight loss and / or appearance compared to 41.1% of girls with ED.

- The evolution in motivations of practice differs between women with or without eating disorders (ED):

- women never having had an ED are invested in fitness sports for different reasons that are not necessarily in link with weight-loss / appearance. It seems that the beneficial health effects of this sport causes the emergence of a feeling of pleasure (intrinsic motivation);
- women with an ED (or having had one) take on a fitness sports practise for different reasons, all linked with weight-loss/appearance (reasons of weight loss, body control, or compensatory). Their motivations for practice remain extrinsic and are described as an « obligation », an « addiction », a « compulsive need », or disappear and they stop their sports practice.

### III. An Ambivalent Position of the Practise in the Development of Eating Disorders

The practice of fitness sports is not a triggering factor of anorexic disorders for the population studied.

Fitness sports seem a less risky practise than others in the development of eating disorders: the prevalence of ED (score EAT-26) among women practising fitness sports (10.3%) is lower than those found in sports considered “at risk” in the development of an ED (aesthetic sports, endurance, with weight categories, and vertical movements).

Fitness sports can be beneficial for some girls with eating disorders, notably when those practising:

- favour merit, (allowing themselves to eat before or after sport);
- are seeking an increase in their sports performance (eating to not regress);
- want to break-free and re-appropriate their body (notably through aquatic fitness sports);
- refuse to accept their image as reflected in the mirror.

### IV. An Engagement Process in the Eating Disorders

For all the women interviewed, the engagement process in eating disorders is characterised by:

**1. Vulnerability factors:** life experiences, as individual as they are, seem to converge to the following elements:

- a difficult family history;
- the development of an ED during adolescence (or post adolescence);
- a pre-existing ill-being (physical, psychological and / or social);
- psychological characteristics such as low self esteem, lack of self-confidence, and a high level of perfectionism;
- the influence of third party accompanying guides in weight loss learning processes (the media, friends, parents, trainers/coaches).

**2. A weight-loss period:** weight loss is desired and sought following a period of ill-being (physical, social and / or psychological), and a weight gain, either real or perceived.

**3. The development of two types of behaviours** inter-linked and characteristics of eating disorders (anorexia type):

- **An ascetic comportment:** the need for control appears and is shown through their relation to eating, the body, to others, to school activities and / or professional, etc.
- **An obsessional comportment:** in parallel these women develop obsessional thoughts with food and the body, which become central priority elements in their life.

These women progressively move ordinary eating and body norms. Weight variations, a BMI lower than normal, and / or the use of compensatory weight-loss methods (provoked vomiting, laxatives, diuretics, or intense sports practices) are as many indicators that emphasize comportments that are increasingly deviant and revealing of an ED.

## V. Differentiated Uses of Sports Practises in Eating Disorders (ED): a typology of profiles

We have identified six profiles of women with (or having had) an ED using sports for reasons that differ.

Four profiles all refer to a use of sports in order to adhere to norms of excellence.

**1. Sport as a trigger for EDs:** the desire to excel in sports pushes young women towards deviant eating habits. The entry into dieting is done to conform to norms of excellence in sports;

**2. Sport Where ED are expressed:** sport is also one of the techniques to conform to thin body models, so as to feel among the « best » or giving the feeling of coming close to perfection through the development of control of one's self. Their self-esteem is built to conform to the excellence that they believe is expected from them. (sports and/or body and / or scholar)

**3. The use of sports to be « in good health »:** ascetic norms, expressed in the capacity to control

one's body through dieting and sports, lead to a redefinition of healthy and unhealthy. These women use sports practice in the beginning of a career, either as an accompanying guide in eating disorders, or used at the end of a career to take hold and move away from a definition of healthy associated with thinness, thus to rebuild muscles or to re-appropriate their body;

**4. The role of appearances:** the external identity, other people's opinion and the desire to conform to dominant norms are at the heart of their motivations;

Two other profiles refer to a sports practice use linked to adhering to gender norms:

**5. The model of femininity:** these women justify their sports practices and the dieting as means to reach a body excellence conforming with feminine models (mothers, sisters, grandmothers, friends, etc.)

**6. The models of virility:** the models of virility play a determining role. Women use sports and dieting either as a means to conform to virility norms and to put traditional femininity norms at a distance, or as a means to express a refusal to adhere to traditional feminine appearances.

These typologies correspond to an image-freeze at a specific moment in the course of life. However, many of these women have come close to other profiles during their anorexic career.

The practice of fitness sports is generally used as a means of self-mastery that reassures these young anorexic women by giving them the feeling of control that they have over themselves, through their ascetic behaviours. In effect, it is through the rigidity of training that they impose on themselves (as much as in the intensity as in the frequency) and in their relentlessness, even when hurt, that these women affirm their control over a body that must not escape them.

Differentiated Uses of Sports Practises in Eating Disorders (ED): a typology of profiles					
Conforming to norms of excellence			Conforming to gender norms		
1. Sport as a trigger for Eds	2. Sport where ED are expressed	3. The use of sports to be « in good health »	4. The role of appearances	5. The model of femininity	6. The models of virility
		3.a Sport accompanying EDs			6.a The role of inverted socialisation
		3.b. Sport as a release from Eds			6.b. Refusal of traditional femininity norms