



(Supplemental Digital Content 1)

The LEAF-Q

A questionnaire for female athletes

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The low energy availability in females questionnaire (LEAF –Q), focuses on physiological symptoms of insufficient energy intake. The following pages contain questions regarding injuries, gastrointestinal and reproductive function. We appreciate you taking the time to fill out the LEAF-Q and the reply will be treated as confidential.

Name: _____

Address: _____

E-mail: _____

Cell: _____

Profession: _____

Education: _____

Age: _____(years)

Height: _____(cm) Weight: _____(kg)

Your highest weight with your present height: _____ (kg)
(excluding pregnancy)

Your lowest weight with your present height: _____ (kg)

Do you smoke? Yes No

Do you use any medication (excluding oral contraceptives)? Yes No

If yes, what kind of medication? _____

Your normal amount of training (average) – number of hours per week and what kind of exercise, such as running, swimming, bicycling, strength training, technique training etc.:

Comments or further information regarding exercise: _____

1. Injuries

Mark the response that most accurately describes your situation

A: Have you had absences from your training, or participation in competitions during the last year due to injuries?

- No, not at all Yes, once or twice Yes, three or four times Yes, five times or more

A1: If yes, for how many days absence from training or participation in competition due to injuries have you had in the last year?

- 1-7 days 8-14 days 15-21 days 22 days or more

A2: If yes, what kind of injuries have you had in the last year? _____

Comments or further information regarding injuries: _____

2. Gastro intestinal function

A: Do you feel gaseous or bloated in the abdomen, also when you do not have your period?

- Yes, several times a day Yes, several times a week
 Yes, once or twice a week or more seldom Rarely or never

B: Do you get cramps or stomach ache which cannot be related to your menstruation?

- Yes, several times a day Yes, several times a week
 Yes, once or twice a week or more seldom Rarely or never

C: How often do you have bowel movements on average?

- Several times a day Once a day Every second day
 Twice a week Once a week or more rarely

D: How would you describe your normal stool?

- Normal (soft) Diarrhoea-like (watery) Hard and dry

Comments regarding gastrointestinal function: _____

3. Menstrual function and use of contraceptives

3.1 Contraceptives

Mark the response that most accurately describes your situation

A: Do you use oral contraceptives?

- Yes No

A1: If yes, why do you use oral contraceptives?

- Contraception Reduction of menstruation pains Reduction of bleeding
 To regulate the menstrual cycle in relation to performances etc..
 Otherwise menstruation stops
 Other _____

A2: If no, have you used oral contraceptives earlier?

- Yes No

A2:1 If yes, when and for how long? _____

B: Do you use any other kind of hormonal contraceptives? (e.g. hormonal implant or coil)

- Yes No

B1: If yes, what kind?

- Hormonal patches Hormonal ring Hormonal coil Hormonal implant Other _____

3.2 Menstrual function

Mark the response that most accurately describes your situation

A: How old were when you had your first period?

- 11 years or younger 12-14 years 15 years or older I don't remember

I have never menstruated (If you have answered "I have never menstruated" there are no further questions to answer)

B: Did your first menstruation come naturally (by itself)?

- Yes No I don't remember

B1: If no, what kind of treatment was used to start your menstrual cycle?

- Hormonal treatment Weight gain
 Reduced amount of exercise Other
-

C: Do you have normal menstruation?

- Yes No (go to question C6) I don't know (go to question C6)

C1: If yes, when was your last period?

- 0-4 weeks ago 1-2 months ago 3-4 months ago 5 months ago or more

C2: If yes, are your periods regular? (Every 28th to 34th day)

- Yes, most of the time No, mostly not

C3: If yes, for how many days do you normally bleed?

- 1-2 days 3-4 days 5-6 days 7-8 days 9 days or more

C4: If yes, have you ever had problems with heavy menstrual bleeding?

- Yes No

C5: If yes, how many periods have you had during the last year?

- 12 or more 9-11 6-8 3-5 0-2
-

3.2 Menstrual function

Mark the response that most accurately describes your situation

C6: If no or “I don’t remember”, when did you have your last period?

- 2-3 months ago 4-5 months ago 6 months ago or more
 I’m pregnant and therefore do not menstruate
-

D: Have your periods ever stopped for 3 consecutive months or longer (besides pregnancy)?

- No, never Yes, it has happened before Yes, that’s the situation now
-

E: Do you experience that your menstruation changes when you increase your exercise intensity, frequency or duration?

- Yes No

E1: If yes, how? (Check one or more options)

- I bleed less I bleed fewer days My menstruations stops
 I bleed more I bleed more days
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