# **Coaching the Female Athlete**

This discussion intends to examine art and practice of coaching of female athletes, and more specifically young girls. We begin by trying to understand the similarities between boys and girls when it comes to athletic participation. We consider next whether girls and boys are, in fact, different before looking at some topics of concern for female athletes.

## A. Commonality: How are Boys and Girls similar?

- 1. Boys and girls will give similar reasons as to why they participate in sports
  - a. reasons include: have fun, improve at a sport, learn new skills (Jonas)
- 2. Boys and girls make similar comments about the effectiveness of their coaches using certain motivational tools
  - a. positive feedback, pep talks and humor rate highly; strict rules rate low (Jonas)
- 3. Boys and girls in the same events appear to have similar muscle fiber (ST:FT) ratios (Martin and Coe)
- 4. Boys and girls are both susceptible to overuse injuries and show similar physiological responses to training

## B. Are Girls just Boys with glands?

- 1. Social differences
  - a. Girls may place greater value on trying to establish and improve relationships
    - girls are more likely to seek emotional support, cooperation and praise
    - girls interact to get support, not necessarily solutions
    - girls tend to like challengers or debaters less after they challenge or debate
    - girls tend to start more conversations, ask more questions and be more supportive of a talker
  - b. Self esteem in girls drops significantly between 9 and 16
    - after the onset of puberty, girls tend to do worse in school, have less confidence, worry more about their bodies and diets, and become more depressed
    - girls are more sensitive to the "importance" of body image (e.g. one study pointed out that 80% of 10 year old girls have dieted already)
  - c. Girls are more fearful than boys, a difference that increases into the teen years (Gilbert)
- 2. School-related differences
  - a. Girls tend to get more involved in school activities than boys
  - b. Girls tend to take harder courses in middle and high school, and study harder than boys

- c. Discipline problems for girls tend to revolve around talking with their peers
- d. Field trips, note-taking, and journal-writing help girls learn
- e. Younger girls tend to play in smaller groups than boys (Gilbert)
- f. Girls react more negatively to friction between students, strict rules, teacher favoritism (Baker)
- g. In science instruction, girls tend to avoid tasks labeled difficult and not return to them if they experience failure (Baker)
- h. In science instruction, girls favor topics that emphasize health, food and safety (Baker)

## 3. Athletic differences

- a. Girls are not as competitive as boys
- b. Girls do not place as great an emphasis on winning (Jonas) and on "dominance striving" (Sapp)
- c. Girls place greater emphasis on "playing fair" and "everyone gets a chance to play" (Jonas)
- d. What girls like about sports is winning the approval of others (Dowling)
- e. Girls participate less in sports than boys

## 4. Physiological differences

- a. Girls tend to have wider hips, potentially causing greater (knee) joint stress
- b. Girls tend to need fewer calories than boys
  - girls seem to eat more light foods (e.g. salad) than heavier foods (e.g. red meat)
- c. Girls have different biomechanics (Dryden)

## C. The Specifics of Coaching Girls

- 1. The Team Environment
  - a. The Cross Country Family
  - b. Team Meetings
  - c. Flexibility and Responsibility
- 2. Stretching and Strength Training
  - a. Stretching routines
    - articles:

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< http://www.elitetrack.com/main> (go to "Articles" and then "Flexibility" under Topic)
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- b. Core strength
  - articles:

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<a href="http://www.pponline.co.uk/encyc/core-strength-exercises.html">http://www.pponline.co.uk/encyc/core-strength-exercises.html</a>
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- <a href="http://www.trackshark.com/articles/2004/7.php">http://www.trackshark.com/articles/2004/7.php</a>
- <a href="http://www.coolrunning.com/engine/2/2\_1/1486.shtml">http://www.coolrunning.com/engine/2/2\_1/1486.shtml</a>

- c. Hip muscle weakness (gluteus medius)
  - exercises:
    - <a href="http://www.bodyresults.com/E2gluteusMedius.asp">http://www.bodyresults.com/E2gluteusMedius.asp</a>
    - <a href="http://www.sportsinjurybulletin.com/archive/lower-back-injuries.htm">http://www.sportsinjurybulletin.com/archive/lower-back-injuries.htm</a>
    - <a href="http://www.sportsinjurybulletin.com/archive/gluteus-exercise.html">http://www.sportsinjurybulletin.com/archive/gluteus-exercise.html</a>
    - <a href="http://www.easyvigour.net.nz/fitness/h\_Gluteusmin\_Str.htm">http://www.easyvigour.net.nz/fitness/h\_Gluteusmin\_Str.htm</a>
- d. Knee muscle weakness (vastus medialis)
  - exercises:
    - <a href="http://www.clinicalsportsmedicine.com/chapters/24c.htm">http://www.clinicalsportsmedicine.com/chapters/24c.htm</a>
    - <a href="http://www.drpribut.com/sports/spknees.html">http://www.drpribut.com/sports/spknees.html</a>
    - <a href="http://www.chiroweb.com/archives/17/12/26.html">http://www.chiroweb.com/archives/17/12/26.html</a>
- 3. Eating and bodily issues
  - a. The Female Athlete Triad: amenorrhea, osteoporosis and disordered eating
    - weight and the scales
  - b. Suggestions for dealing with weight gain related to puberty
  - c. Iron intake
    - understanding iron intake and iron loss
    - testing for low iron

### Discussions of Iron Deficiency and Female Athletes:

### Fatigue and Iron Deficiency in Athletes - a patient's guide

<a href="http://www.medic8.com/healthguide/articles/fatigueandFedeficinathlete.html">http://www.medic8.com/healthguide/articles/fatigueandFedeficinathlete.html</a>

### Pumping Iron: How Iron Levels in Your Blood Affect Running Performance

<a href="http://www.runningtimes.com/issues/04janfeb/pfitz.htm">http://www.runningtimes.com/issues/04janfeb/pfitz.htm</a>

• Article in Running Times magazine, written by an exercise physiologist who is a 2-time distance-running Olympian. Good because it relates this issue to athletes, not the normal population.

## Pumping iron into your body

- < http://faculty.washington.edu/crowther/Misc/RBC/iron.shtml>
  - Relates iron intake/deficiency to runners

#### Anemia

- < http://www.speke-pcrc.co.za/articles/2004/Blood.shtm>
  - Fairly concise. Uses some technical language, but very good.

## **Fast-women.com Message Board**

< http://web1.nyrrc.org/ubb/Forum2/HTML/000303.html>

- Some message board posts by various (anonymous) women on the issue of low iron and running. One post leaves some web addresses that relate to this topic.
- < http://web1.nyrrc.org/ubb/Forum2/HTML/000358.html>
  - More message board posts on this topic

## Ferric Failure: Iron Deficiency and Running Performance

- < http://www.runningtimes.com/issues/02janfeb/iron.htm>
  - Another Running Times article that's not bad, but still a bit general

## How to iron out the problems of anaemia

- < http://www.pponline.co.uk/encyc/0247.htm>
  - Also relates iron deficiency to runners

## **Anemia and Blood Boosting**

- <a href="http://www.gssiweb.com/reflib/refs/276/sse81.cfm?pid=60&CFID=1902126&CFTOKEN=53783674">http://www.gssiweb.com/reflib/refs/276/sse81.cfm?pid=60&CFID=1902126&CFTOKEN=53783674</a>
  - Refutes the idea that one can lose much iron through sweat or footstrike hemolysis

## More general discussions of iron deficiency and iron deficiency anemia:

## Iron Deficiency and Iron Deficiency Anaemia - a patient's guide

<a href="http://www.medic8.com/healthguide/articles/irondeficiency.html">http://www.medic8.com/healthguide/articles/irondeficiency.html</a>

• General discussion, pretty decent.

## **Preventing and Treating Iron Deficiency**

- < http://www.pamf.org/patients/IronHandout.html>
  - Short, general, but includes some iron counts on certain foods (with calories)

### **Anemia (Iron deficiency)**

- < http://www.diagnose-me.com/cond/C1667.html>
  - General, brief discussion with lots of terminology defined

## **Iron: Deficiency and Toxicity**

- < http://www.drhoffman.com/page.cfm/120>
  - Good discussion, hits most relevant topics from iron absorption to iron deficiency

### Discussions of Iron Absorption:

#### **Breaking new ground**

< http://www.action.org.uk/touching\_lives/2005/06/iron\_absorption>

#### **Facts About Iron**

< http://ibscrohns.about.com/cs/nutrition/a/fdairon.htm>

### **Iron Absorption**

<a href="http://medlib.med.utah.edu/NetBiochem/hi9.htm">http://medlib.med.utah.edu/NetBiochem/hi9.htm</a>

## **Iron Absorption**

<a href="http://sickle.bwh.harvard.edu/iron\_absorption.html">http://sickle.bwh.harvard.edu/iron\_absorption.html</a>

• This one is good because it includes things that inhibit iron absorption and things that assist iron absorption. Sometimes a bit technical.

## Specific issues and topics relating to iron deficiency:

## Can increased vegetable consumption improve iron status?

<a href="http://www.unu.edu/unupress/food/8F171e/8F171E08.htm">http://www.unu.edu/unupress/food/8F171e/8F171E08.htm</a>

• The answer here is that the evidence is inconclusive.

## **Iron and Vegetarian Diets**

<a href="http://www.vnv.org.au/Nutrition/Iron.htm">http://www.vnv.org.au/Nutrition/Iron.htm</a>

• This one comes from a Vegetarian group and has good basic info. Probably good to pass along this one to any vegetarian kids.

## Science of Sport: Can Endurance Runners Be Vegetarians?

<a href="http://www.runnersweb.com/running/rw\_news\_frameset.html?http://www.runnersweb.com/running/news/rw\_news\_20050528\_RRN\_Vegetarians.html">http://www.runnersweb.com/running/rw\_news\_frameset.html?http://www.runnersweb.com/running/news/rw\_news\_20050528\_RRN\_Vegetarians.html</a>

• Looks favorably at vegetarian diets as not necessarily a problem for endurance athletes.