In this 1983 report, NBC's Dr. Art Ulene discusses the common condition among women athletes known as "amenorrhea." The disorder results in eradication of the menstrual cycle.

Keywords
Amenorrhea, Menstruation, Female Athletes, Long Distance Runner, Hormones, Reproduction, Body Fat, Stress, Starvation, Fertility, Calcium, Osteoporosis, Pregnancy, Ovulation, Body Weight

Transcript
Menstruation and Female Athletes
JANE PAULEY, co-host:
More than 100 years ago Charles Darwin observed that animals, which were undernourished or exposed to severe stress, were much more likely to become infertile. According to Dr. Art Ulene, the same
problem can affect humans.

ART ULENE, M.D.:

History is filled with such experiences Jane. We saw the problem during the Second World War when the undernourished victims of the war and the concentration camps stopped having menstrual periods. Now we are seeing a similar phenomenon among women athletes. The problem is called amenorrhea, or amenorrhea as it is pronounced by some.

CAROL OTIS, M.D.: When did you stop having regular periods?

KAREN, female athlete: My freshman year of college when I got my distance.

Dr. ULENE: This competitive runner is suffering from amenorrhea. Her menstrual periods have stopped completely and probably won’t start again until she stops her training for the Olympics, until she stops running 60 miles a week. Karen is a member of the women’s track team at UCLA. More than 2/3 of her teammates also have amenorrhea.

Dr. OTIS: We think it is a complex cause. And we think it probably originates in the brain at the side where some of the cycling hormones for female reproduction are located. We do know that body fat does play a role in this, that a leaner woman will have more of a chance of having less menstrual periods or having her menstrual period stop.

Dr. ULENE: In the average healthy, mature woman, 22% of the body weight is made up of fat. The theory is that when a woman loses that fat, for instance through stress and starvation in a war torn country or through the self-imposed regiment of rigorous athletic training, the body automatically shuts off fertility, by causing the menstrual periods to stop.

Dr. OTIS: The first studies that were done on women with amenorrhea were done by survey studies of the athletes in the Olympics. And it was noted that when they were training for a six-month period of time they wouldn’t have periods and in those days back in the 50s and 60s women would stop training for six months, then their periods would resume. Nowadays, the athletes are training year round and so we’re noticing the amenorrhea continues year round because they’re not taking layoffs.

Dr. ULENE: Amenorrhea seems to be limited to women in long distance running events and other high stress competition where loss of body fat becomes a major factor. But more cases affecting recreational runners have been reported recently.

Dr. OTIS: When women stop having their periods for more than four months they should be evaluated by a physician because there are other causes other than the stress of running or losing weight or other stresses that can cause it. And it’s very important that they be evaluated first to make sure that there aren’t any of these other causes for stopping periods.

Dr. ULENE: When the amenorrhea is caused by the physical activity the condition is reversible.

Dr. OTIS: Do you have any concerns or worries about your future?

KAREN: Not right now. I don’t plan to have a family and when I want to have a family, it may become a problem. I might have to lay off for a while and you know reduce the stress and the miles and then everything should be fine.

Dr. ULENE: Research into this kind of amenorrhea has been limited, but already one possibly significant side effect has been discovered by scientists.
Dr. OTIS: There are some preliminary studies from a group in San Francisco suggesting in women athletes who have had amenorrhea for longer than three years, there may be some thinning of the bones or osteoporosis.

The total results of that study are not in yet and they’re very preliminary data. So far that’s the only thing we know about long-term, serious side effects of the amenorrhea. We are emphasizing that women who have it should be taking an adequate amount of calcium intake, about a gram or a gram and a half a day. And we monitor them carefully to make sure that stress fractures or bone problems are not developing.

Dr. ULENE: And as Dr. Otis pointed out, any woman with previously normal menstrual periods who then stops having them, must be checked by her physician if the problem persists. That’s the only way to avoid overlooking something which requires medical treatment. By the way, one of the conditions which must be considered is pregnancy, even though these women stop menstruating, they may still ovulate or release an egg occasionally. That means that it is possible for them to get pregnant if they are sexually active, Jane.

PAULEY: I’m wondering these are obviously the seriously competitive athletes. What about a woman who is simply athletically inclined, maybe jogs a lot everyday? Does is have any affect on them?

Dr. ULENE: Well, the average woman who does a mile or two a day, who does it regularly is not likely to get into this kind of problem unless her body weight drops extremely low. It is this intensity, this commitment to major activity, this stress and also the substantial weight loss. These women are extremely lean. All of those things appear to be factors.

PAULEY: Yes. Very interesting. Thank you doctor.