The Origins of Weight Training for Female Athletes in North America

e 1111)

Jan Todd

The University of Texas at Austin

Today, there is virtually no women's sport in which some form of weight training or resistance exercise is not part of the conditioning program used by the athletes of that sport. This is so because resistance exercise is helpful to athletes in many ways; it increases running and jumping ability, creates greater muscular endurance and decreases the likelihood of injury. During the first two-thirds of the twentieth century, however, most athletes, male and female, eschewed weight training because it was considered

by coaches and physical educators to be detrimental to athletic performance. Weight training, it was widely and incorrectly believed, would make an athlete slow, stiff and "musclebound" qualities obviously undesirable in an athlete of either sex.¹

Women athletes of the late nineteenth and early twentieth century had, of course, more serious problems to contend with than the myth of musclebinding. They were hindered in their pursuit of athletic achievement by a general, societal concern for the de-feminizing impact of sports as well as by the medical community's belief that "strenuous" sports interfered with women's reproductive capacities.² A 1925 newspaper interview with Dr. Thomas D. Wood, Director of Physical Education at coeducational Columbia University reveals this typical mindset;

"Whether girls are engaged in social diversions or outdoor exercises, the first thought they should have is the preservation of safety, health and well-being. . .the cherishing of that quality of womanliness which is the chief attraction and finest attribute of women." He continued, "They must not over-exercise. . . (and they) should not take part in any game requiring vigorous effort."³ The New Gymma

While Wood's comments were

addressed to his interviewer's questions about basketball and track and field, sports in which a growing number of women participated in the 1920s, there is no reason to doubt that he, and the majority of mainstream American "experts" in the first half of the twentieth century, would have believed that using weight training to enhance a woman's athletic performance was not only too strenuous but decidedly unfeminine. In spite of such professional opposition, a few women did flout convention by lifting barbells and dumbells as part of their training to become better athletes. They are the foremothers of our modern weight-trained women athletes and their story begins with that early advocate of exercise for women, Dr. Diocletian Lewis.

In 1862, Dio Lewis published *The New Gymnastics* for *Men*, *Women and Children*, a textbook of gymnastic exercises and drills which featured the use of lightweight dumbells, Indian Clubs and weighted wands.⁴ Lewis' system was deemed particularly suitable for women and was adopted

> as the physical education program by many Northeastern women's schools over the next several decades. During this period, literally thousands of American women became familiar with dumbells. Indian Clubs and lightweight barbells as part of their regular physical education program.⁵ As such training became common, women came to understand that their bodies could be strengthened and improved through regular physical training with these sorts of implements; "gymnastics," according to the Lewis system, was seen as one of the most healthful activities a young woman could pursue.⁶ Furthermore, Lewis argued that women were as well-suited to gymnastic training as were men. His biographer, Mary F. Eastman, reports, in fact, that "In every one of the thirteen classes of graduates. . . the best gymnast was a woman. . . In each class there were from two to six women superior to any of the men."⁷

By the time the century ended, the list of sports considered acceptable for women had expanded beyond golf, croquet, lawn tennis and cycling to new, more vigorous sports such as basketball, field hockey, rowing and track and field. Many young women embraced these new sports and

> seemed to physically benefit by their participation, but most physical educators and physicians continued to warn against

the strenuousness of these activities. Physical educators, searching for a way to satisfy conventional medical opinion and still pacify the students who wanted to play these new games, frequently required gymnastic training as a prerequisite to play. Dudley and Kellor's *Athletic Games in the Education of Women* notes, for instance, that "Few [women's universities] allow girls to play basketball without heart and lung examinations. Gymnastics are ordinarily required [before play]... In one institution a year of gymnas-

This 1862 illustration from Dio Lewis' *The New Gymnastics for Men, Women & Children* is one of a series of dumbell exercises he considered appropriate for women.

April 1992

tics is required before such games as hockey and basketball can be played at all. In another, they can play all other games but basketball, without having had gymnastics. One college requires that gymnastics be taken for two years before athletics are permitted."⁸

Admittedly, the dumbell and club drills of the fin de siecle gymnastic regimens were less rigorous than the systematic weight programs used by today's athletes. However, they are philosophical kin in their shared goals of increasing the strength and fitness of women athletes and in decreasing their chances of being injured. The fact that light dumbell and club drills were so widely accepted in the early twentieth century eased the transition to slightly heavier clubs and dumbells and, later, to modern weight training. "Gymnastics" of course, was often used to refer to heavy as well as light weight lifting. Katie Sandwina, for instance, the most famous of the professional strongwomen who toured North America in the early part of the twentieth century, was at times referred to as a "gymnast" even though her act included no tumbling and did include the lifting of a 600 pound cannon and the bending of iron bars.⁹

One of the people largely responsible for the widespread acceptance of weight training for women in the early twentieth century was Bernarr Macfadden, publisher of *Physical Culture* magazine. In both *Physical Culture* and his short-lived magazine, *Women's Physical Development*, Macfadden urged women to use dumbells, cables and other forms of resistive exercise to improve themselves physically. He was a firm believer in the benefits of exercise for women and he devoted considerable space in his magazines to the personal testimonials of "physical culture girls" such as Dorothy Alden Becker, who was said to have escaped "death's door" through right living, fresh air and plenty of exercise.¹⁰

Becker's letter to Macfadden, printed in the "Forum for Physical Culture Girls," reports that she was given up to die by her physicians when her parents decided to take her to Santa Cruz, California, for a nature cure. After she learned to swim, she was placed under the instruction of a diving coach. Becker wrote,

> The first command my instructor gave was that I would have to develop the muscles of my back if I wished to become a proficient diver. From this time on, I took up all branches of gymnasium exercises, such as tumbling, bar and ring work, dumbells, Indian Clubs and later boxing. This ensured symmetrical development so that today there is not a single muscle in my body which is knotty or unbecoming [to] the feminine figure." ¹¹

Becker's letter is significant as it is one of the earliest known references of a woman using resistance exercise to deliberately enhance sport performance. She goes on to note that the exercises enabled her to master ". . .83 different dives, to swim 50 yards in 32 seconds," and to ride a surfboard for more than 75 yards while standing on her head.¹²

Macfadden further promoted the relationship between resistive training and athletics through the sponsorship of several "Physical Culture Extravaganzas" during the first decade of the twentieth century. His first women's physique contest was simply that, a physique competition, but the winner of the second women's competition, held in 1905, was selected on the basis of points scored in athletic contests as well as on the development and symmetry of her physique. The athletic contests consisted of several foot races and a weightlifting competition. The 1905 show had nation-wide impact as it was held in Madison Square Garden, attracted over 15,000 spectators and was covered by most of the New York papers.¹³

By 1910, however, Macfadden's *Physical Culture* contained almost no dumbell prescriptions for women, although it continued to argue in favor of women's athletics. For the next two decades, *Physical Culture*, and a number of influential physical educators, advocated "classical" or Grecian dance *a la* Isadora Duncan and Ruth St. Denis as the most beneficial form of exercise for women.¹⁴ Only *The National Police Gazette* continued to publicize weightlifting women, though most of those featured in the *Gazette* were professional strongwomen, not sportswomen. One notable exception was Caroline Bauman, a student of "Professor Atilla" (Louis Durlacher).¹⁵ Bauman appeared several times in the *Gazette* and later taught boxing to society women as a means of figure improvement¹⁶

Other health and fitness magazines, such as Strength (1912-1932), published by Alan Calvert, followed Macfadden's lead in ignoring weight training for women during the second decade of the century. But in the mid-twenties, Strength, then the most influential weightlifting magazine in North America, began actively promoting the idea of women and strength. A 1923 editorial by Carl Easton Williams, for instance, raised concerns about the national fitness level of post-World War I America and entreated readers, " . . .our first requirement, if we are to raise the level of our national vigor, is to idealize and glorify strength. . . . We want to see the lives of all our boys and girls, all of our young men and young women, colored with this point of view. We want them to be saturated with this notion of strength as being the basis of a scheme of living."¹⁷ A second article in that same issue, "Is Strength Masculine and Weakness Feminine?", argued against the "clinging vine" definition of femininity, "When men were athletic and women were strictly non-athletic it was natural that the latter came to be looked upon as weak sisters, for they were. Today, however, women are playing golf and

tennis, swimming, driving cars, even aeroplanes, and doing so many other things that men are doing that many of our oldfashioned notions about them are going by the board."¹⁸ Three years later, *Strength* again endorsed athletic women in the article, "Are Girl Athletes Masculine?", which was subtitled: "The Female Athlete Personifies the Highest Type of Womanhood and is Proven Decidedly Feminine." ¹⁹

Strength's enthusiasm for the athletic woman of the 1920s was part of a wider, societal acceptance of a new, fit and slender physical ideal for women. Silent film stars such as Annette Kellerman, a former champion swimmer and diver, helped to dispel the myth that women athletes were large and masculine. Kellerman, famous for her facial beauty and her figure, was often referred to as "the perfect woman" by the press; and in 1918 she authored Physical Beauty: How to Keep It, one of the first celebrity exercise books for women. The exercise routine Kellerman recommended involved swimming and barbell training.²⁰ As historian Lois Banner has pointed out, the most prominent women in the 1920s aside from film stars, were athletes-Helen Wills, Gertrude Ederle, Suzanne Lenglen, and Sonja Heine, to name just a few-and their popularity encouraged other women to view athletics in a more favorable light.²¹ Many women began serious training during this decade as opportunities for participation in the Olympic Games and in other contests continued to increase.²²

In 1927, *Strength* published its clearest statement on the question of women and resistance training, in an article entitled, "Cash In On Trained Muscles." The article, written by Charles MacMahon, a frequent contributor to the magazine, begins, "Many young men and women who are athletically inclined, do not appreciate the value of proper physical training for the purpose of making themselves better athletes." MacMahon explains, "Proper physical training methods can strengthen your wrist and arm so that a tennis racket, baseball, baseball bat, cricket bat or any other sport apparatus, will be light for you to handle, thereby allowing you to handle them easily and accurately." He concludes, "In these days of commercial sport, a fellow, or even a young woman, can make his or her favorite sport a profession, provided they are clever enough at it."²³

The number of women-and men-involved in athletics continued to increase during the 1920s yet there is little evidence that many of them took MacMahon's suggestions to heart. Women's Athletic clubs, modelled after those of men, were organized in a few cities in the United States, and in some of these, dumbells, medicine balls and barbells were part of the club's equipment. A 1922 photograph in *The National Police Gazette*, for instance, shows a Brooklyn women's athletic club. In the center of the **photo** is Ethelda Bleibtrey, "international swimming champion," surrounded by her male coach and 10 other women who display a variety of resistance apparati.²⁴ who substantially changed the course of weight training for women athletes. The first was Ivy Russell (b. 1907 in Surrey, England), a remarkably strong and unusually muscular young woman who gave numerous posing and weightlifting exhibitions during the 1930s in Great Britain. She was introduced to weightlifting at age 14 by A. E. Streeter, who was retired from the British Army's physical training staff. Following his retirement, Streeter had developed a reputation, in the London suburb where he made his home, as a disciple of the curative power of exercise; and before long he was treating invalids and giving advice to the parents of sickly children. Russell apparently came to him in the early stages of tuberculosis and, according to Health and Strength, it was not long before she was surpassing her teacher in health and strength. ²⁵ In 1925, at age 18 and weighing only 125 pounds, Russell did a clean and jerk of 176 pounds; in 1930, at a bodyweight of 134 pounds, she did a 193 pound clean and jerk and also completed a 410 1/2 pound deadlift. On another occasion she did 14 repetitions with 180 pounds in the deep kneebend.²⁶

As reports of Russell's herculean strength and amazing muscularity spread throughout the physical culture community, other British women became interested in amateur competition. In a long letter to the editor published in May of 1932 in *Health and Strength* magazine, Russell urged B.A.W.L.A. to admit lady lifters and to sanction women's competitions. This letter is believed to be the first attempt by any woman to fight for equal athletic opportunities for women in amateur weightlifting.²⁷ Russell was eventually successful in her campaign for equality and she defeated Tillie Tinmouth in B.A.W.L.A's first sanctioned women's competition for the "Nine Stone Ladies Champion of Great Britain" title.²⁸

Russell is important here, however, not because of her strength but because she was considered an exceptional all-round athlete. Wire service reports described her as being a champion fencer, sprinter and wrestler.²⁹ Although weightlifting enthusiasts were captivated by Russell's strength, which was, in fact, prodigious, it was her physique and her athleticism which captivated the media and, in turn, the public. Russell's relatively small size and extreme muscularity were antithetical to most people's conception of a "strongwoman." It has to be kept in mind that prior to the 1930s the world's most prominent female strength athletes were the professionals Minerva and Sandwina, both of whom weighed over 200 pounds during their athletic primes and carried considerable bodyfat on their large frames.³⁰ Russell, however, was only of average size and she displayed a degree of muscularity that would be envied by many of our modern women bodybuilders. Despite her leanness, however, Russell was still relatively large-breasted, an important factor in defining women's beauty throughout the twentieth century.³¹ For a variety of reasons, therefore, Russell was a new archetype for women weightlifters. She appeared on the

Two figures emerged in the early 1930s however,



Ivy Russell's unusual muscularity is displayed to advantage in this 1932 photograph from Kobel wire service.

cover of *The National Police Gazette* in 1934, posed with a discus; and in 1937 a *Pearson's Weekly* columnist wrote, "Miss Russell's biceps are exactly the same size as those of Max Schmeling, the German heavyweight who beat Joe Louis; her calf is half an inch bigger than Schmeling's; her thigh is the same measurement as that of Tommy Farr and one inch bigger than that of Joe Louis." ³²

Whether Russell was pleased to be compared to Schmeling and Louis is unknown, as Russell has refused all modern attempts at interviews. ³³ A 1934 article on Russell mentions, however, that "the way was not easy" for her, as "criticism was plentifully regular" among her non-lifting peers.³⁴ Despite the criticism, Russell continued to train through the end of the 1930s and her achievements served to convince many other women, both in Great Britain and the United States, that strength and womanhood were not incompatible and that weightlifting was comp-atible with athletics.

The second, and ultimately more influential person in the story of how women athletes came to train with weights, was Bob Hoffman of York, Pennsylvania, who began publishing *Strength & Health* magazine in 1932. Hoffman, born in Georgia in 1898, was an active athlete throughout his adolescence and early adulthood; according to his own immodest accounts, he was a successful competitor in such sports as canoeing, running, and boxing. He began to train with weights in 1923 and discovered, as he continued to compete in various sports, that as he got stronger from his weight training his athletic skills increased. This discovery changed Hoffman's life.³⁵ He began putting together a team of weightlifters to compete in the American Continental Weightlifting Association's sanctioned meets and, in 1932, having decided to dedicate his life to lifting, he purchased the Milo Barbell Company, then the foremost manufacturer of weightlifting equipment in the United States.³⁶ This proved to be a successful venture for Hoffman as York Barbell set the standard for the industry for the next four decades and his magazine, *Strength & Health*, outsold all other magazines in the field until the 1970s.³⁷

Strength & Health was more than simply the voice of the competitive weightlifting community; it was also an innovator in its advocacy of new ideas and methods in exercise and nutrition. From its very first issue—and in virtually every issue that followed-Hoffman hammered home the connection between weight training and success in athletics.³⁸ Furthermore, he and his York barbell men gave dozens of exhibitions in which flexibility, jumping ability and speed—as well as strength—were demonstrated. For Hoffman, success in sports was a patriotic duty—an affirmation of manliness and American vigor reminiscent of the Muscular Christianity philosophy of the mid-nineteenth century. Like those earlier perfectionists, Hoffman argued that women, no less than men, should see to the training of their bodies; and because of the prominence enjoyed by Strength & Health, Hoffman's advocacy of weight training for women did not go unnoticed.³⁹ In the beginning, Hoffman featured his wife and several of his mistresses, all large, robust women who took up weight training under Bob's influence. It is possible, in fact, to actually

follow Hoffman's marital and extra-marital arrangements via the pages of Strength & *Health* over the first two decades of the magazine's publication.⁴⁰

Rosetta Hoffman, the only woman Hoffman actually married,⁴¹ appeared in Strength & Health for the first time in January of 1934. Two photographs appeared of Rosetta in that issue, and in one she is holding what is reportedly 100 pounds over her head with one hand. The caption beneath her photograph reads in part, "Here is the true glorified version of beautiful womanhood. . . Like her famous husband, she is an ardent exercise advocate and loves the weights. . . Her flashing smile and sparkling eyes and beautiful body is [sic] a fitting example for the women of America to follow."42

The two photographs and the 100 pound weight brought comments from the readers of Strength & Health, and in March of 1934, Harry Good authored the magazine's first women's article: "Strength, Health and Beauty for the Ladies." This article opened with Good's observation that since the Rosetta pictures had appeared, "there has been continual discussion, questioning and writing as to whether women should use barbells or lift weights." Good, of course, favored women's training, arguing that such exercise will only make them "happier, healthier, and better mothers," a refrain familiar long before 1934. More important was the fact that Good suggested that the models to whom women should look regarding the effects of

weight training were not the professional strongwomen who were "large boned and would have been even bigger. . . if they had not lifted weights," but the "countless lady acrobats, aerialists, tumblers and adagio dancers who became more beautiful... more shapely... by the [resistance] work they do."⁴³

Thanks to her husband's editorial decisions, Rosetta became a minor phenomenon in Strength & Health. In December of 1934, she authored her first column on diet and exercise, "Beauty Building for Women," appeared on the cover; and was featured in an advertisement for the "Miracle Rejuvenator," sold under her name.⁴⁴ On page seven of that issue she is shown modelling a rowing machine and, some pages later, she is shown lifting weights. A caption below these photographs lists her as weighing 136 pounds at a height

of 5'3".⁴⁵ For the next several years, articles carrying Rosetta's by-line appeared with regularity in Strength & Health. 46 Interspersed with recipes and beauty tips was advice on the best ways to use dumbells, several mentions of that amazing "English miss," Ivy Russell,⁴⁷ and an occasional plug for the benefits weights can have for women athletes. In a January 1937 column, for instance, Rosetta reported that, "Training with weights makes it possible for me to enjoy other games and sports . . . I am sure too, that you who read this will obtain as much benefit as I from moderate training with weights." Though Rosetta described her training as "moderate," in the next paragraph she explained that, "The secret of barbell training is to use comparatively heavy weights for a few repetitions. This is not tiresome. Rather it builds strength in muscles and ligaments, builds energy, internal strength and vital power." 48

In 1936, Strength & Health devoted a great deal of space to the Olympic Games, and both Bob and Rosetta's articles were supportive of the serious way in which the Germans approached athletics-particularly the rigorous training methods used by German women. The American Eleanor Holm's famous tippling, for instance, is juxtaposed in one article by Bob Hoffman with the comment that, "The German girls are big and strong and take their training and athletics so much more seriously than do our girls.",49

Hoffman attended the Berlin games as coach of the US weightlifting team

and Rosetta accompanied him. Though she had no formal role, she apparently used her days aboard the ocean liner Manhattan to get acquainted with many of the American women athletes. This was time well spent, as her column featured several of these women following her return. Baltimore gymnast Connie Carrucio, who was the high point scorer for the United States in the team gymnastic competition, was the first woman to appear in a feature article in Strength & Health. 50 There was no mention of any weight training in this





This January 1934 photograph of Rosetta Hoffman caused con-

troversy in the early days of Strength & Health magazine. The bar bell was made to look much heavier than it was.

article, but Caruccio appeared on the cover of the July 1937 issue, with dumbells in hand, and inside the issue it was stated that she had begun doing resistance training. In 1944, Caruccio was again mentioned in *Strength & Health*, and this time it was reported that she pressed 100 pounds overhead at a bodyweight of 124.⁵¹ Whether Caruccio continued her weight training throughout this period is not known, but she did make the 1948 Olympic team and score well, despite her advanced age.⁵² Another woman Olympian featured by Rosetta's column was the sprinter Betty Robinson, who came back and made the Olympic team after a severe plane wreck.⁵³

Throughout 1937 and 1938, *Strength & Health* argued with increasing frequency for heavy training by female athletes.⁵⁴ A September 1938 article entitled, "What is Musclebound?" is typical of the magazine's post-Berlin Olympic's enthusiasm and is illustrated with a photograph of

Ginger Lawler, an adagio dancer and tumbler who was also a serious barbell trainer. 55 Hoffman's repeated and calculated use of photographs of attractive gymnasts, acrobats and adagio dancers who were also barbell trainers did much to dispel the old prejudices about weights making women large, mannish and inflexible. This was especially true during the 1940s and early 1950s, the era of the "Muscle Beach girls" when women such as Pudgy Stockton were featured not only in Strength & Health but in many pictorial magazines as well.

The September 1938 issue marked Rosetta's last appearance in *Strength & Health*, as the Hoffman marriage collapsed. For the next several months no articles featuring women appeared in *Strength & Health*, but the April 1939 issue featured Hoffman's new girlfriend, Gracie Bard, on the

cover. Over the next several years Hoffman contributed quite a few articles to the magazine using Bard's by-line and photographs of weight-trained women were increasingly featured. Bard's own lifting feats were spotlighted in the magazine in the May 1940 issue, in which readers were told that she could jerk 75 pounds overhead with one hand.⁵⁶

Bard's name first appeared as a regular contributor to *Strength & Health* in January of 1941. It lasted less than a year, but it did much to heighten the weights/athletics con-

nection. The photography accompanying Bard's first article featured Doris Hillgardner, a weight trainer, swimmer and diver who won the 1940 West Indian diving championship and who testified to the beneficial effect weight training had on her athletics. ⁵⁷ The article also featured a photograph of Muriel Fornell, of Brooklyn, whom the caption claimed had recently cleaned and jerked 120 pounds at a bodyweight of 117.⁵⁸

In the December 1941 issue of *Strength & Health*, Bard was replaced by one of Hoffman's new amors, the *zaftig* Dorcas Lehman. According to the article, under Hoffman's name, Lehman had weighed over 200 pounds before she began barbell training and following the rules of healthful living. According to the article, the weights worked wonderfully for Lehman; she dropped to 149 pounds at a height of 5'7" and gained tremendously in strength. She also entered into a



The main reason that neither Ketterman nor Lehman were featured in *Strength & Health* to the extent that Rosetta had earlier been featured was that a young Santa Monican beauty,

Abbye "Pudgy" Eville Stockton [whose story appeared in *Iron Game History* 2(1)] carried women's weight training to an entirely new level on her square shoulders. Two small photos of Eville appeared in the September 1940 issue of *Strength & Health* with a caption that read: "This small lady has strength equal to a much heavier man, yet retains a small, symmetrical and most attractive physique. . . Further proof that heavy exercise, weightlifting, hand balancing and acrobatics will produce the ideal development for the ladies too."⁶²

Olympic gymnast Connie Caruccio appeared on the cover of the July 1937 issue of

Strength & Health.

Strength & Health

Are You Abraid to Die?

Stockton, who was born in 1917, began training at age 20 under the direction of Les Stockton, who introduced her to barbells and dumbells, and took her with him to the beach in Santa Monica where, on weekends, physical culturists from around Southern California gathered to work on their lifting and acrobatics. Pudgy and Les were soon married, and following Les' service in World War II they opened a health studio in Los Angeles.⁶³

As Muscle Beach became a physical culture mecca in the early 1940s, Pudgy Stockton's unusual combination of strength, athletic ability and shapeliness made her a great favorite with photographers for both weightlifting and regular magazines. Two newsreels of that era featured her, vitamin and camera companies used photos of her to sell their products, and by the end of the 1940s Pudgy's figure had graced 42 magazine covers from around the world. This exposure gave her a national reputation and, in 1944, she began writing a regular column for Strength & Health, called "Barbelles." Stockton's S&H columns



were extremely important to the development of women's weight training. 64

From the first, her column featured strong, attractive women who were also good athletes. Pudgy featured her friends from Muscle Beach — women like Edna Rivers, Evalynne Smith and Relna Brewer Macrae—all of whom were also seen in such pictorial magazines as *Pic, Laff* and *Hit.*⁶⁵ Relna Macrae, for example, was accomplished in adagio dance, jiu jitsu, handbalancing, aerial work and wrestling and she could supposedly tear a Los Angeles phone book apart with her hands.

Other "Barbelle" columns which helped the cause of

weight training for athletics featured competitive athletes such as Walt Disney studio artist Pat King, who began weight training to gain weight and increase her endurance. In 1945, King, who trained with bodybuilder Gene Jantzen (and later married him), was performing barbell pullovers, overhead presses, barbell rowing motions and bench presses. These exercises enabled her, according to Stockton, to run a mile in six minutes and 50 seconds, five miles in 47 minutes, to swim a mile in 38 minutes and to perform 900 squats (deep kneebends) in 53 minutes. 66

A 1946 Stockton column featured Maria Blumer Hoesley of Monroe, Wisconsin, whose father, a physical culturist, had encouraged her to become involved in gymnastics. In 1942, while still a teenager, Hoesley placed first at the National Swiss-American gymnastic meet, and she also won a number of titles in Turnverein (German gymnastic society) competitions. Stockton wrote, "Marie attributes her needed additional strength and endurance to the barbells..."⁶⁷ Alyce Yarick, the

wife of gym owner Ed Yarick and a competitive track and field athlete, who trained with barbells in the late 1940s was also featured by Pudgy in *Strength & Health*. An Oakland, California resident, Yarick won numerous prizes in local track and field competitions.⁶⁸ Edith Roeder, a competitor in track and field as well as basketball, was another barbell devotee. A former beauty contest winner, Roeder worked hard at the Olympic lifts, and in 1955 she cleaned and jerked 170 pounds in a special exhibition held at the Junior National Weight-lift-ing Championships. She is also credited with a one hand clean and jerk of 100 pounds.⁶⁹

Though a number of sportswomen did take up barbell

training in the 1940s they were all individual athletes, generally women introduced to. weight training by boyfriends or husbands, and none of those featured by Stockton in Strength & Health were competitors at the national or Olympic level. But things changed dramatically in the early 1950s as preparations for the Helsinki Olympics-the first Olympic Games to feature Soviet state-produced athletes-got underway. There was considerable speculation throughout the United States about what to expect from the Soviet Union at Helsinki. At the 1948 Olympics the USSR had sent no athletes, only observers, whose job it was to come up with a plan to create a new international sporting power.⁷⁰ Hoffman, and most other Olympic coaches, watched these developments with considerable anxiety. Hoffman, of course, continued to maintain in his editorials that American athletes-male and female-needed weight training to hold off this new communist threat. Finally, one man, Walter Schlueter, chosen as the U.S. women's swimming coach for the 1952 Olympic Games, decided to try what Hoffman had been preaching for so long.

Thus it was that in late 1951, a women's athletic team, the Town Club Swimming Team from Chicago, was placed on a weight training program. Schleuter began the program on September 29, 1951 and the routine used by his 25 women swimmers—including several from previous Pan American and national teams—was composed of basic barbell exercises such as squats, curls, military presses, bench presses and pullovers. At the end of their three month training program, Schleuter reported that the women had more stamina and greater speed. He was pleased and started them on a new cycle of weight training.⁷¹ Schleuter's training program marked the first time in the United States that any women's *team* was put on a progressive resistance program to enhance their athletic performance.

By 1959, when Hoffman published *Better Athletes Through Weight Training,* a few of America's top male athletes had been converted to barbell training. Olympic decathlete Bob Richards, shotputter Parry O'Brian and runner Mal Whitfield were early converts, as were hammer thrower Harold Connolly, discus ace Al Oerter, and even amateur golf champion Frank Stranahan. By the decade's end, their stories had appeared in *Strength & Health*, as had the word, following the Helsinki and Melbourne Olympic Games, that one major difference between American and Communist teams was the amount and intensity of the weight training done by the Soviet male *and* female athletes. It was a message which did not go unheeded for long.⁷²

Though it was widely believed that Soviet women athletes used weight training before the Helsinki Games, the conversion of western women still came slowly. But at least two women heard the warnings and headed to the gym prior to the Melbourne Games of 1956. Canadian thrower Jackie MacDonald began barbell training in an attempt to make her nation's Olympic team, ⁷³ and a young, New York school girl, Cynthia Wyatt, asked her brother to help her "get strong." In some ways, Wyatt's may be the most important link in the long chain of women lifters; she was America's first internationally successful, weight-trained female athlete.

In a 1988 interview, Cindy Wyatt, who married powerlifting champion Don Reinhoudt and is now the mother of two children, asserted that had it not been for her weight training, she would never have been able to compete as successfully as she did in track and field. As she explained:" I was always the smallest competitor, by far, at the national meets. For a number of years, Earlene Brown was number one, and I was number two in the United States. But Earlene outweighed me by nearly a hundred pounds. Internationally, I was up against Galena Zabyna and Tamara Press from the Soviet Union. They had the advantage of being not only a lot taller and heavier than I was, but they weight trained, too."⁷⁴

Still, at 5'6' and 165 pounds, Cindy did well. When she was 12, she had been introduced to the weights by her older brother, Pat, who taught her to throw the shot and discus. There was, of course, no track and field program in her school in those pre-Title IX days, but Wyatt loved the events and the barbell work and, in 1958, she attended her first national level competition. Although she was only 14, she won both the shot and discus in the junior division and finished sixth overall in the women's open division. Wyatt went on to win the indoor nationals as an adult in 1963 and 1965, and she made every Pan American and other international team between 1960 and 1966-except for the two Olympic teams. She was even given one of the first "sports scholarships" for women when Dr. Michael You, of Honolulu, picked up her academic expenses and those of four other track and field athletes so that the women could represent the University of Hawaii in the early 1960s.⁷⁵ It was in Hawaii, under the tutelage of World and Olympic weightlifting champion Tommy Kono, that Wyatt's strength truly blossomed. In an exhibition in 1962, she jerked 230 pounds, and she was the subject of a feature story in Strength & Health. ⁷⁶

As Wyatt's reputation as a thrower grew, and word of her weight training spread, she soon found other women athletes coming to her for advice. She recalled years later that: "It was funny. In the late 1950s everyone knew that the women from the communist countries were lifting weights for the shot and discus, but no one except me seemed to care. But if some of the other American women had been training in those days I would never have made as many travel squads as I did. I'm really too small to be a thrower. I was just lots stronger than the bigger girls."⁷⁷

Though Wyatt, who now works as a psychiatric counselor near Brockton, New York, unarguably did much to advance the acceptance of weight training for women athletes, there is one other *Strength & Health* story which needs to be told—that of gym owner Jerri Lee. Lee held the women's record, and her husband, Bob, held the men's

record for the Mt. Whitney Marathon-a 26 mile course straight to the mountain's 14,496 foot summit. The Lees had done the Whitney marathon several times and had used a combination of running and weight training in their training, But in 1959, as an experiment, they decided to find out how well they would do in the Mt. Whitney run if they did all their training in the gym, with weights. So, they set out on a barbell regimen that only the most persevering of athletes could have endured. By the end of their training they were doing 20 sets of 100 repetitions (with weight) in the quarter squat, set after set of 50 repetitions in the leg curl and leg extension, sets of 500 in the leg raise and much other "high rep" work. Their bodies apparently thrived on the program, and on the appointed day-without any climbing or running- both set new records in the marathon: Bob's at 4:56: 33 and Jerri's at 7:56:58.78

Throughout the 1960s, women athletes in a growing number of sports, inspired by stories like Cindy Wyatt's and Jerri Lee's in *Strength & Health*, turned to weights for additional strength and endurance. Britain's Stella Jacobs pioneered the way for women long jumpers; Audrey McElmury led in women's cycling; and Canadian Nancy Greene won the World Cup downhill ski championships in 1967 after a training program which included sets of 40 repetitions in the squat with 170 pounds.⁷⁹ By the 1968 Olympic Games, weight training had become commonplace among women throwers at the international levels of the sport; and by the 1972 Games, many track athletes, swimmers, cyclists and skiers followed suit.

North American women athletes came slowly to the use of weight training for athletic enhancement because of a variety of societal taboos surrounding women, strength, and femininity. Also, for the first two-thirds of this century, almost all coaches and physical educators believed that weight training was detrimental to athletic performance. Despite these barriers, however, Bob Hoffman's *Strength & Health* continued trumpeting the truth and weight training gradually found converts in women across the United States. Inspired by the magazine and then featured in it as an inspiration to others, women like Russell, Stockton, Wyatt and Lee became the torchlights Hoffman used to illuminate the prejudices which for so long had denied women full access to an important aspect of success in athletics—the physical power produced by systematic weight training.

²Patricia Vertinsky's *The Eternally Wounded Woman: Women, Doctors and Exercise in the Late Nineteenth Century* (Manchester, England: Manchester University Press, 1990) offers the most complete discussion of the medical community's attitudes toward exercise and womanhood. See also Helen Lenskyj's *Out of Bounds: Women, Sport and* Sexuality (Toronto: The Women's Press, 1986).

³May Wilkinson Mount, "Girl Athletes Risk Their Lives in Too-Strenuous Sports." *Pittsburg Post Gazette.* 1925. Newspaper clipping in Coulter Collection, Women's Exercise File # 2. The Todd-McLean Collection, The University of Texas at Austin.

⁴Dio Lewis, M.D., *The New Gymnastics for Men, Women and Children* (Boston: Ticknor and Fields), 9.

⁵ Lewis' system was also perpetuated through the 421 graduates of his Normal Institute for Physical Education [1861-1868]. Nearly half of these newly trained physical educators were female, according to Lewis' biographer, Mary F. Eastman. (Mary F. Eastman, *Biography of Dio Lewis, A.M., M.D.* (New York: Fowler and Wells, 1891), 81-83.

⁶It should be noted that Lewis' system called for rhythmic drills set to music in co-educational settings. He was not an advocate of heavy weightlifting. and had, in fact, a rival in the Boston area in Dr. George Barker Windship, famous for his advocacy of the "health lift," in which the object was to lift heavy weights for short distances by the use of a platform-type "lifting machine." Women did train in Windship's gym, and at least one parlor version of a lifting machine was advertised during the late nineteenth century featuring a woman in the advertisement. It is impossible to tell, however, how widespread the use of the health lift may have been among women. Windship's story is told in "Autobiographical Sketches of a Strength Seeker, *The Atlantic Monthly* 9(January 1862): 102-115 and in Joan Paul, "The Health Reformers: George Barker Windship and Boston's Strength Seekers," *Journal of Sport History* 10(Winter 1983): 41-57. A reproduction of a health lift machine appears in Harvey Green's *Fit For America* (New York: Pantheon Books, 1986), 199.

⁷Eastman, *Biography*, 98.

⁸Gertrude Dudley and Frances A. Kellor, *Athletic Games in the Education of* Women (New York: Henry Holt and Company, 1909). 100.

⁹See, for instance, "A Remarkable Mother: A Professional Gymnast Who Does Not Scorn the Duties of Motherhood." Clipping from *Physical Culture* contained in "Strongwomen" scrapbook, Coulter Collection, The Todd-McLean Collection, The University of Texas at Austin.

¹⁰ Marion Malcolm, "A Forum for Physical Culture Girls," *Physical Culture* (1911?):
93. Clipping from Coulter Collection, Women's Exercise File #3, The Todd-McLean Collection, The University of Texas at Austin.

- 11 Ibid.
- 12 Ibid.

¹³ For information on Macfadden and these early physique competitions. see: Jan Todd,
 "Bernarr Macfadden: Reformer of Feminine Form, "*Iron Game History* 1(March 1991):
 3-8.

¹⁴ Isadora Duncan, Ruth St. Denis, and Ted Shawn (who married St. Denis in 1914) were all influenced by Francois Delsarte's system of "Applied Aesthetics." These three adapted Delsarte's belief in the ability of the body to express emotion through movement to a new dance form which came to be characterized by loose clothing, "natural" movements, mythic themes and which was the precursor of Modern Dance. In addition to performance dance, however, "harmonic gymnastics" and other systems of physical culture based on dance movement also appeared and grew popular. Macfadden's *Physical Culture* was filled with literally hundreds of photos of Grecian-robed women and girls gamboling in sylvan settings, often portraying certain "attitudes" which were part of Delsarte's theories. For more information see: Ted Shawn, *Every Little Movement* (Pittsfield, Massachusetts: Eagle Printing and Binding Company, 1954) as well as Steele Mackaye, *Harmonic Gymnastics and Pantomimic Expression*, ed. Marion Lowell, (Boston: published by Marion Lowell. 1895). and Eleanor Georgen, *The DelSarte System of Physical Culture* (New York: The Butterick Publishing Company, 1893).

¹ See Terry Todd, "Al Roy: Mythbreaker" *Iron Game History* 2(1): 12-16, for a more complete discussion of the phenomenon of "musclebound" and its relationship to athletics.

April 1992

¹⁵"Professor" Atilla opened a gym on Times Square in New York City in the early 1890s after touring successfully in Europe. Atilla is most often remembered for his partnership with Eugen Sandow but he also served as the personal trainer to several members of European royalty and, after he opened his New York gym, to many American celebrities. Atilla's scrapbooks and medals are now on deposit at the Todd-McLean Collection at the University of Texas in Austin.

¹⁶ Clipping, Caroline Bauman file, Coulter Collection, The Todd-McLean Collection, The University of Texas at Austin.

¹⁷Carl Easton Williams, "Strength Has a New Meaning," *Strength* 8(December 1923):
53.

¹⁸Gertrude Artelt, "Is Strength Masculine and Weakness Feminine?" Strength 8(December 1923): 54.

¹⁹Hamilton Dana, "Are Girls Athlete's Masculine?" *Strength* 11(November 1926): 31-33, 80-82.

²⁰Annette Kellerman, *Physical Beauty: How to Keep It* (New York: George H. Doran, 1918).

²¹Lois Banner, American Beauty (New York: Alfred A. Knopf, 1983), 276

²² In 1900, women were allowed to participate in only two of the twelve Olympic events-lawn tennis and golf. They were allowed to compete in swimming and archery in 1908, to fence in 1924 and to participate in track and field events for the first time in 1928. David Wallechinsky, *The Complete Book of the Olympic Games* (New York: Penguin, 1984).

²³Charles Macmahon, "Cash In on Trained Muscles," *Strength* 12(June 1927): 25-27.

²⁴Photographic clipping, from The National Police Gazette, hand-dated, March 11, 1922. Women's exercise file #3, Coulter Collection, Todd-McLean Collection. The University of Texas at Austin.

²⁵ "Great Oaks From Little Acorns Grow," *Health & Strength* 53(May 28, 227.

²⁶David P. Willioughby, *The Super Athletes* (New York: A. S. Barnes, 1972), 575-576.

²⁷Russell, Ivy, "Give Us a Chance, Mr. Lowery!" *Health & Strength* 53(May 28, 1932): 631.

²⁸H. Harvey Day "Women With The Strength of Strong Men," *Strength and Health* 53(April 23, 1932): 487 and Lowry, W.J., "What I Thought of the Lady Lifters," *Health and Strength* 53(April 30, 1932): 518.

²⁹According to Dr. Al Thomas, women's bodybuilding historian, the set of four photographs of Ivy Russell circulated by Kobel Feature Photos of Frankfort, Indiana, were taken by Scottish photographer Ron Rennie. The four photos show Russell as a fencer, sprinter, lifting a barbell over her head and posed as "The Thinker." The caption sent by Kobel to *Strength & Health* identifies her as Britain's "champion all-round woman athlete." Photography tiles, Coulter Collection, Todd-McLean Collection, The University of Texas at Austin.

³⁰See Jan Todd, "The Mystery of Minerva," Iron Game History 1(April 1990): 14-17.

³¹ The public's fascination with the bosom as a symbol of femininity has influenced the history of women's weight training and bodybuilding. Fears that women would injure their breasts in too-vigorous sports such as basketball and field hockey gave way in strength training to a fear that women would "lose" their breasts by becoming too muscu-

lar. Modern women's bodybuilding has been especially caught up in the bosom debate, as most women who possess the muscularity and definition necessary for bodybuilding competition no longer possess the necessary fat levels to also have "acceptably" large breasts. This has led some modern bodybuilders to surgically augment their breasts with implants, a procedure many consider unethical or, at least, ironic.

³²Pearson's Weekly, October 9, 1937. cited in Al Thomas, *The Female Physique* Athlete: A History to Date (Abs-solutely Publishing Co., 1983). 90. Russell appeared on the cover of *The National Police Gazette* 142(September 1, 1934).

³³Weightlifting historian David Webster of Irvine, Scotland, Dr. Al Thomas and the author have all failed to get Ms. Russell to talk about her lifting career.

³⁴"Great oaks," *Health & Strength.* 227.

³⁵Bob Hoffman, Better Athletes Through Weight Training (York. Pennsylvania: Strength & Health Publishing Company, 1959). 13.

³⁶The American Continental Weightlifting Association was formed in 1917 by David P. Willoughby, Ottley Coulter and George Jowett. The ACWLA kept the first amateur records in competitive weightlifting, sanctioned contests and was brought into the fold of the Amateur Athletic Union (AAU) in 1926. See David P. Webster, The Iron Game (Irvine, Scotland: John Geddes Publishing, 1976).

³⁷ Through Strength & Health ceased publication in 1985, its influence on the American weightlifting community ended nearly a decade earlier when bodybuilding impressario Joe Weider made dramatic changes in the format of his muscle publications. most notably the use of elaborate color photography. *Strength & Health*, still run by Hoffman, then in his 70's and in poor health, was not up to the competition and lost ground to Weider's publications during the last decade of the magazine's existence. Though layout and color photography played a large role in the shift, *Strength & Health's* loss of subscribers also resulted from Hoffman's continued devotion to Olympic weightlifting, a sport in which America had not excelled since the 1950s.

³⁸Bob Hoffman, How to Improve Your Sport." *Strength & Health* 1(December, 1932): 6-8.

³⁹The National Strength and Conditioning Association honored Hoffman for his efforts on behalf of weight training and athletics at their 1987 National Convention in Las Vegas, Nevada. For information on the Muscular Christianity movement see Green, *Fit for* America, 181-215. Hoffman's patriotism ran so deep that in later years he founded a "Save the United States" movement and hired a Washington lobbyist to get his ideas on exercise and nutrition before Congress.

⁴⁰Information confirming Hoffman's relationship was obtained through personal interviews in June of 1987 with Alda Ketterman Hoffman, of Dover. Pennsylvania, and with John Grimek, former editor of *Strength & Health* magazine who began working for Hoffman in the 1930s. Grimek also makes his home in York, Pennsylvania.

⁴¹Though never formally married, Alda Ketterman Hoffman lived as common-law wife with Bob Hoffman for more than 30 years and inherited the major portion of his assets at the time of his death Hoffman has no known children.

⁴² Strength & Health 2(January 1934):, 11.

⁴³Harry Good, "Strength, Health and Beauty for the Ladies," *Strength & Health*. 2(March 1934): 8.

⁴⁴ Rosetta Hoffman's "Miracle Rejuvenator." was a cable device which allowed for different resistance settings. The advertising copy describes Rosetta as "The Perfect Woman." The ad reads, "Let Rosetta help you become everything a woman should be. Radiantly alive, well, strong, beautifully built, admired by everyone." Orders were sent to York under Rosetta's name. The ad appears on page 6 of the December 1934 issue. ⁴⁵ Strength & Health 3(December 1934): 29.

⁴⁶ Professor John Fair of Auburn University at Montgomery recently interviewed Rosetta Hoffman for his history of Bob Hoffman and the York Barbell Club. While Professor Fair reports that he had been led to believe from several sources that Hoffman himself had penned these articles, in the interview, Rosetta claimed to have been the sole author. Fair does corroborates the fact that during the magazine's many years of publication, Bob Hoffman used a variety of pseudonyms. Terry Todd, who served as managing editor of *Strength & Health* in the mid-1960s, was told by Bob Hoffman that he had written the articles bearing Rosetta's name.

⁴⁷ References to Russell appear in Rosetta's column in *Strength & Health* 3(November 1935): 24 and in 4(January 1936): 37.

⁴⁸Rosetta Hoffman, "Physical Training Builds Health, Strength and Beauty for the Ladies," Strength & Health 4(January 1936):12, 36-38.

⁴⁹Bob Hoffman, "What Happened at the Olympics?" Strength & Health 4(October 1936):13.

⁵⁰No individual medals for women were given in gymnastics at the 1936 Olympic Games as women's gymnastics was at that time only a team competition. According to Rosetta, Caruccio was the best gymnast there, however, and learned her gymnastics at a *Turnverein* in Alleghany, New York. Rosetta Hoffman, "Connie' Caruccio: the World's Premier Lady Gymnast," *Strength & Health* 4(November 1936): 20, 47-50.

⁵¹Pudgy Stockton, "Barbells," Strength & Health 13(August 1944): 11.

⁵²Wallechinsky, Olympic Games, 322.

⁵³Rosetta Hoffman, "Betty Robinson: Sprinting Champion," *Strength & Health* 5(December 1936): 19, 40-41.

⁵⁴Grimek interview.

⁵⁵Robert L. Jones. "What is Musclebound?" *Strength & Health* 6(September 1938): 22-23, 41.

8(May 1940): 23.

⁵⁷Grace Bard, "The Smart Woman Plans Her Meals," *Strength & Health* 9(January 1941): 28.

58Ibid.

⁵⁹Bob Hoffman, "A Challenger for the Title," *Strength & Health* 9(December 1941): 30-31, 36-38.

⁶⁰ "Letters From Our Readers," Strength & Health 9(January 1942): 8

⁶¹Grimek interview and Bob Hoffman's will, Hoffman file, Todd Papers, Todd-McLean Collection, The University of Texas at Austin.

⁶² Photo caption, Strength & Health 18(September 1940): 23.

⁶³Vic Tanny, "West Coast Venus," Strength & Health 9(November 1941): 30-33.

⁶⁴According to Dr. Al Thomas, the two newsreels were made by Universal International in the late 1940s and lasted approximately 10 minutes each. Clips of "Whatta Build," seen by the author, showed Stockton doing a variety of acrobatic stunts with her husband, Les, including holding him over her head in a "hand-to-hand." Todd-McLean film collection, The University of Texas at Austin.

⁶⁵Rivers, featured in "Biceps on the Beach," *Hit* (April 1947). could hold a "flag" (body extended horizontally in space while supported only by the hands gripping a pole), was a competitive swimmer and first rate tumbler. Evalynne Smith was Los Angeles al-city diving champion in 1937, 1938 and 1939, and was city 100 meter swimming champion for 1937 and 1938. She began weight training to rehabilitate a childhood leg injury. See: Vic Tanny, "Evalynne Smith: The Blond Bomber", *Strength & Health* 10(November 1942): 22-23. and Pudgy Stockton. "Barbelles" *Strength & Health* 12(June 1944): 20.

⁶⁶Pudgy Stockton, "Barbelles," Strength & Health 13(May 1945): 20-21.

⁶⁷Pudgy Stockton, "Barbelles," Strength & Health 14(May 1946): 21.

⁶⁸Pudgy Stockton, "Barbells," Strength & Health 18(October 1950): 14.

⁶⁹L. Arnold Pike, "Roeder tops women lifters," *Strength & Health* 18(March,1950): 19, 32. Roeder is mentioned again in Pudgy Stockton "Barbells," *Strength & Health* 18(May/June 1950): 24-25, 46. Roeder was also featured in a 1950 Fox-Movietone newsreel of the first AAU national weightlifting meet for women.

⁷⁰Marshall Smith, "How Reds 'Mobilized' to Win Olympic 'War', "*Life* (July 28, 1952): 16-17. Clipping, Coulter Collection Women's Files, The Todd-McLean Collection, The University of Texas at Austin.

⁷¹Harry McLaughlin, "Barbells Aid Olympic Swimming Aspirants," *Strength & Health* 20(May 1952): 26-27, 42.

⁷² Information on the use of weights by the Soviets in preparation for the Helsinki Olympics and biographical information on weight trained athletes from the 1950s is contained in Hoffman's *Better Athletes Through Weight Training*.

⁷³Jim Murray, "Canadian Barbelle Glamazon Seeks Olympic Victory," *Strength & Health* 23(July 1955): 12-13, 44.

⁷⁴Telephone interview, Cynthia Wyatt Reinhoudt, May 1988.

⁷⁵Ibid. See also, Cynthia Wyatt as told to Tommy Kono, "Cindy Wyatt Wants To Be a Champion," Strength & Health 30(November, 1962): 28-29, 56, 57, 58.

⁷⁶ Kono, "Cynthia Wyatt," Strength & Health, 28-29.

77 Wyatt interview.

⁷⁸Bob and Jerri Lee," Weight Training for a Mountain Marathon." Strength & Health 28(August 1960): 24-25, 45-48.

⁷⁹Zenta Thomas, "Britain's Weight-trained Lady Jumper." *Strength & Health* 32(February 1964): 50-52. Dan Levin, "What Makes Audrey Pedal? Tiga muk!" *Sports Illustrated*, (November 24, 1969): 68-69. "Bunny from B.C." *Time*. (January 20, 1967). Clippings, Willoughby Women's File, Todd-McLean Collection, The University of Texas at Austin.)

