APPARATUS FOR ACTIVATING PARTICULAR MUSCLES

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ABSTRACT

An apparatus for activating particular muscles: a) a belt with two ends, mountable on the torso region of an individual wearer, the belt having a rear portion for traversing a lower back of the individual wearer; b) a pair of shoulder straps connected to the belt wherein each of the shoulder straps includes two ends, one of the ends of each connected to the belt and another end of the shoulder straps is connected to a back support; c) the back support member positioned between and connecting to the pair of shoulder straps and the belt; d) and at least one stationary hand grip element connected and extending from the back support.
APPARATUS FOR ACTIVATING PARTICULAR MUSCLES

[0001] This application is a continuation-in-part of co-pending U.S. application Ser. No. 12/027,386, filed on Nov. 12, 2010, and entitled “Exercise Apparatus For Activating The Muscles”, by the same inventors herein.

BACKGROUND OF INVENTION

[0002] a. Field of Invention

[0003] The present invention relates generally to an exercise apparatus useful for activating particular muscles, for example, the oblique and bicep muscles that are engaged when an individual is running wearing the apparatus. The apparatus may include a belt with two ends, mountable on the individual’s torso region; securement means on the belt’s ends for adjustably securing apparatus about individuals’ torso region; a pair of shoulder straps with two ends on the strap’s distal portion, configured to be hung on the individual’s shoulders extending from apparatus rear to front, whereby at least some of the ends of the shoulder straps are connected to the belt; at least one hand grip element, but preferably two, extending from the back support member; and the back support member positioned on an individual wearer’s back. The individual wearing the present invention exercise apparatus may place hands on the hand grip elements when running, such that the individual’s hands are removably positioned behind their neck with arms folded at the elbows for static or dynamic arm/chest exercise.

[0004] b. Description of Related Art

[0005] People participate in various exercises, such as aerobic activities, weight training, resistance training, and functional dynamics, to obtain higher levels of fitness. As is common in the fitness industry, basic exercises can be accomplished by using equipment. The use of exercise equipment for physical fitness comes on many forms. As is common in the fitness industry, basic exercises can be accomplished by using equipment. The devices range from simple, jump rope, to the more sophisticated apparatus and devices.

[0006] Varied types of exercise apparatuses have been available over the years, with such use being based on the idea of targeting, for example, heart rate and improving cardiovascular health, while other physical training apparatuses specifically target certain muscle groups for defining, toning and strengthening them. The size and shape of the apparatus vary as they invariably depend on the particular needs and circumstances of the purpose for which they will be applied to.

[0007] Some exercise apparatuses in the form of specialized vests, body suits, or belts which are attached to the individual’s upper body torso or waist, and typically equipped with a resistance component to engage the individual’s hands or legs. Known devices for providing resistance to motion during multidirectional movement include weighted vests, belts, and arm or leg bands. These devices have disadvantages which will become more apparent with reference to the following disclosure. For example, one disadvantage of a weighted wearable device is that they are often bulky and cumbersome, which may inhibit effective movement and provide resistance in a limited way while running, jogging or walking. The prior art does not provide an effective means for isolating and targeting specific muscle groups without resistance bands or weights during running.

[0008] Some exercise apparatuses come in the form of specialized vests, body suits, or belts which are attached to the individual’s upper body torso or waist, and typically equipped with a resistance component to engage the individual’s hands or legs. Known devices for providing resistance to motion during multidirectional movement include weighted vests, belts, and arm or leg bands. These devices have disadvantages which will become more apparent with reference to the following disclosure. For example, one disadvantage of a weighted wearable device is that they are often bulky and cumbersome, which may inhibit effective movement and provide resistance in a limited way while running, jogging or walking. Studies have shown that increased lung capacity in an individual will attain better results in cardiovascular exercise. Lung capacity determines how well the oxygen flows throughout an individual’s body. Exercises that increase an individual’s lung capacity allow an individual to achieve better results. Direct results can be seen with swimmers, who over time develop the capacity to hold their breath under water for a significant period because of their increased lung capacity. In general athletes with increased lung capacity have greater strength, endurance and stamina.

[0009] Runners who desire to have greater strength and endurance need to integrate the strengthening of muscle groups with exercises that increase lung capacity while running. An exercise helpful to increase lung capacity is raising an individual’s arms overhead. Several weight bearing exercise equipment strives for similar results where an individual may perform weight lifting exercises to increase lung capacity. In weight training exercises the raising of an individual’s hands with weights above their head directly affects the strengthening of their bicep muscles. These exercises produce limited success, in view of the fact there are limited alternatives for duplicating the cardiovascular exercises while running. To date, the prior art has not resolved this need with the existing cardiovascular equipment. Thus, there is a need for cardiovascular equipment that will allow the individual to keep arms up over their head during cardiovascular exercises and provide support for the hands during the same.

[0010] The prior art does not provide the benefit of increasing lung capacity while targeting the oblique and bicep muscles through a passive workout while an individual is running. Additionally, several existing cardiovascular equipment promote the natural involuntary arm swinging motion during running which contributes to reducing the individual’s endurance while exercising. There remains a need for an affordable, portable, exercise apparatus that is simple and effective, easily fitted on an individual, which will improve the cardiovascular health by increasing the lung capacity of the individual with the benefits of engaging the oblique and bicep muscles while running.

[0011] The apparatus disclosed herein involves the passive workout for the oblique and bicep muscles when the hands of the individual grasp the handle grip element installed on the back of the apparatus while running. The arms raised above the individual’s head and the hands held stationary behind the neck while running activate the oblique and bicep muscles, thereby providing a passive workout for these muscles while running, where the individual’s natural bodyweight is the resistance, or acts as the only resistance, and no other additional weight or resistance is required. The apparatus disclosed herein permits the arms to be raised up over the individual’s head and the hands held stationary behind the neck, exposing the oblique muscles, increasing the tension and stress on the oblique muscles for the duration of time that the individual is running. Thus the apparatus disclosed herein
targets, strengthens, tones and adds definition to the oblique muscles. Additionally when the arms are brought up over the head and held stationary behind the neck, the arm muscles, including the bicep muscles, are engaged and exposed to the natural stress and tension for the duration of time that the individual is running. Thus the apparatus disclosed herein also targets, strengthens, tones and adds definition to the bicep muscles. Moreover, in assisting the raising of an individual’s arms while running, the apparatus disclosed herein increases the lung capacity of the individual during running, thus allowing for the increase oxygen exchange and dissolution. The apparatus increases the individual’s tolerance, endurance and strength while preventing the natural swinging movement of the individual’s arms while running.

[0012] The apparatus disclosed herein satisfies these long felt needs by adding the benefits of a passive workout for the oblique and bicep muscles to the common exercise of running, and solves the limitations of the prior art in a new and novel manner. Following are related prior art:

[0013] U.S. Pat. No. 3,697,065 to Glasburner issued October 1972 describes and illustrates a training aid for maintaining the body of a runner in a proper sprinting form from start to finish during a race. The apparatus includes base plate means adapted for connection with the torso of the sprinter, head engaging means for engaging the sprinter’s head, and connecting means for coupling the head engaging means with the base plate means so as to maintain the head and neck of the runner in an extended forward position relative to the torso during sprinting.

[0014] U.S. Pat. No. 5,993,362 to Gohbadi issued November 1999 discloses a stirrup for each hand, a knee band for each knee, and an ankle band for each ankle. The harness includes front and back straps and is attached to the belt in the front and the back. A loop is attached on the harness at each shoulder for receiving an elastic cord. At least two more loops are attached to the back strap to receive elastic cords. Specialized channels in the knee band are adapted to receive elastic cords that are attached to the belt and the ankle. A method of use for practicing punching and blocking motions includes passing an elastic cord through the loops on the back harness, grasping each end of the cord with either hand, and repeatedly punching and blocking. A method of use for practicing kicking includes attaching elastic bands to the belt, passing them through the specialized channels on the knee band, attaching the cords at the ankle, and repeatedly kicking. The elastic cords provide resistance to the muscles, thereby improving muscle group coordination, strength, and response time. A specialized glove, sit-up wedge, and hand stirrup for use with the invention are disclosed.

[0015] U.S. Pat. No. 6,125,792 to Gee issued October 2000 relates to a support harness for a child to be used when learning activities such as skating, in-line skating, and bicycling. The support harness comprises a length adjustable chest strap having a releasable fastener, a left and right length adjustable shoulder strap, each of the shoulder straps being connected by slidable loops to the length adjustable chest strap at anterior and posterior chest strap regions; and a length adjustable handle strap with a grasping region. The handle strap is connected to the left and right shoulder straps at left and right posterior shoulder strap positions. The design and the materials used in its construction allows this support harness to be manufactured at minimal cost. It has been found that the points of support, near the shoulders and approximately aligned to the back of the neck region of the child allow the child to maintain an appropriate posture for skating and bicycling.

[0016] U.S. Pat. No. 6,346,011 to Cook issued August 2002 discloses an exercise harness connected to an unweighting system with shoulder straps. The exercise harness having a waist belt suspended by the shoulder straps which belt may be secured to a user. The exercise harness further having left and right leg or knee bands connected to the waist strap with a left front strap and a right front strap, respectively. A strap is provided forming a sliding “W” connection between the waist belt and the two leg bands to allow for freedom of leg movement when walking, running or jogging. The exercise harness is also provided with a gait modification strap having one end secured to the waist belt and the other end secured to one of the leg bands after wrapping the gait strap partially around a leg of the user.

[0017] U.S. Pat. No. 7,147,590 to Toven issued December 2006 describes an apparatus for training a runner a proper arm-swing technique includes a body harness, and first and second engagement members for engaging the wrists or hands of the user. In one embodiment, the engagement members are grips that the user grasps while running. The apparatus further includes first and second upper straps configured to attach to the body harness and to the wrist coverings. The apparatus also includes first and second lower straps configured to attach to the body harness and to the wrist coverings. The body harness may be configured as a vest or formed from a plurality of straps. The arm-swing apparatus may further include first and second back springs configured to attach to the body harness and to a belt configured to fit around the waist of the runner. A method of using the arm-swing training apparatus is also disclosed.

[0018] U.S. Pat. No. 7,874,970 to Gilson issued January 2011 relates to a rotational sports training and conditioning system has a hip harness, a torso harness, a pair of adjustable connectors that connect diagonally from the torso harness to the hip harness, an elongated cord and a club band. The hip and torso harnesses each have selectively positioned cord loops for attachment of the cord and/or the club band. The connectors selectively synchronize relative rotation of the pelvis and torso for swing, strike or throw training and conditioning. The cord assists or resists rotational motions. The club band synchronizes arm positioning and forearm rotation with rotation of the pelvis and upper torso.

[0019] Notwithstanding the prior art, the present invention is neither taught nor rendered obvious thereby.

SUMMARY OF INVENTION

[0020] An apparatus for activating different muscles includes a) a belt with two ends wherein the belt is mountable on the torso region of an individual wearer, the belt having a rear portion for traversing a lower back of the individual wearer and a front portion for traversing a front portion of the individual wearer; b) a pair of shoulder straps connected to a back support wherein each of the pair of shoulder straps includes two ends on each strap wherein at least one of the ends of each of the shoulder straps is connected to the belt and wherein another end of the shoulder straps is connected to a top portion of the back support wherein the shoulder straps may be expandable to a size for the individual wearer; c) the back support positioned between and connecting to the pair of shoulder straps in a rear portion of the apparatus and the back support connecting to the belt through a back support con-
connection means whereby the back support is mountable against the back region of the individual wearer; and,
d) and at least one stationary hand grip element connected and extending from the back support member mountable on back of the individual wearer and including the back support member having a relatively elongated base wherein the at least one hand grip element is sized and shaped to be grasped by the individual wearer and further sized and shaped to retain the individual wearer’s hands in an immovable position behind the individual wearer’s neck.

In some preferred embodiments of the present invention apparatus for activating different muscles, the back support includes apertures for the shoulder straps to be threaded through the back support.

In some preferred embodiments of the present invention apparatus for activating different muscles, there are two stationary hand grip elements connected and extending from said back support.

In some preferred embodiments of the present invention apparatus for activating different muscles, the apparatus further comprises securement means positioned on the ends of the belt for adjustably securing the apparatus about torso region of the individual wearer.

In some preferred embodiments of the present invention apparatus for activating different muscles, the securement means is selected from the group consisting of a buckle, hook and loop fastener, button, buttonhole, clip, zipper, hook and eye fastener, snap, a plurality of monofilament hooks in cooperation with a plurality of monofilament loops, a magnet, a thread and combinations thereof. In some preferred embodiments of the present invention apparatus for activating different muscles, each of the pair of shoulder straps are configured to be hung each on one shoulder of the individual wearer, extending from the rear of the apparatus to a front portion of the apparatus.

In some preferred embodiments of the present invention apparatus for activating different muscles, the apparatus further comprises adjustable means on the shoulder straps for adjusting each shoulder strap for the individual wearer’s comfort.

In some preferred embodiments of the present invention apparatus for activating different muscles, the at least one hand grip element is formed of a material selected from the group consisting of moldable material selected from the group consisting of cloth, wool, elastic, cotton, nylon, plastic, polyurethane, rubber, silicone, metal, padding, cushion, foam, synthetic, fabric, neoprene, anti-slip fabric, anti-slide fabric, insulation, and combinations thereof.

In some preferred embodiments of the present invention apparatus for activating different muscles, the hand grip element is securely affixed to the back support by fixation means.

In some preferred embodiments of the present invention apparatus for activating different muscles, the belt, the hand grip element and the shoulder straps are elasticized and stretchable.

In some preferred embodiments of the present invention apparatus for activating different muscles, the apparatus further comprises adjustable means on the belt for adjusting the belt for the individual’s comfort and fit.

In another preferred embodiment, there is disclosed an apparatus for activating particular muscles comprising: a) a belt with two ends wherein the belt is mountable on the torso region of an individual wearer, the belt having a rear portion for traversing a lower back of the individual wearer, and a front portion for traversing a front portion of the individual wearer; b) a pair of shoulder straps connected to the belt wherein each of the shoulder straps includes two ends on each strap wherein at least one of the ends of each of the shoulder straps is connected to the belt and wherein another end of the shoulder straps is connected to a back support whereby the shoulder straps may be expandable to a size for the individual wearer; c) the back support member positioned between and connecting to the pair of shoulder straps in the rear portion of the belt and wherein at least one of the back support member is mountable against the back region of the individual wearer and wherein at least one of the back support member and the pair of shoulder straps is connected to the rear portion of the belt said back support being a single unistructural element; d) and at least one stationary hand grip element connected and extending from the back support member mountable on back of the individual wearer and including the back support member having a relatively elongated base wherein the at least one hand grip element is sized and shaped to be grasped by the individual wearer and further sized and shaped to retain the individual wearer’s hands in an immovable position behind the individual wearer’s neck. In some preferred embodiments of this version of the present invention apparatus, there are two stationary hand grip elements connected and extending from said back support.

In some preferred embodiments of the present invention apparatus for activating different muscles, the apparatus further comprises securement means positioned on the ends of the belt for adjustably securing the apparatus about torso region of the individual wearer.

In some preferred embodiments of the present invention apparatus for activating different muscles, the securement means is selected from the group consisting of a buckle, hook and loop fastener, button, buttonhole, clip, zipper, hook and eye fastener, snap, a plurality of monofilament hooks in cooperation with a plurality of monofilament loops, a magnet, a thread and combinations thereof.

In some preferred embodiments of the present invention apparatus for activating different muscles, each of the pair of shoulder straps are configured to be hung each on one shoulder of the individual wearer, extending from the rear of the apparatus to a front portion of the apparatus.

In some preferred embodiments of the present invention apparatus for activating different muscles, the apparatus further comprises adjustable means on the shoulder straps for adjusting each shoulder strap for the individual wearer’s comfort.

In some preferred embodiments of the present invention apparatus for activating different muscles, the at least one hand grip element is formed of a material selected from the group consisting of moldable material selected from the group consisting of cloth, wool, elastic, cotton, nylon, plastic, polyurethane, rubber, silicone, metal, padding, cushion, foam, synthetic, fabric, neoprene, anti-slip fabric, anti-slide fabric, insulation.

In some preferred embodiments of the present invention apparatus for activating different muscles, the hand grip element is securely affixed to the back support by fixation means.
In some preferred embodiments of the present invention apparatus for activating different muscles, the belt, the hand grip element and the shoulder straps are elasticized and stretchable.

In some preferred embodiments of the present invention apparatus for activating different muscles, the apparatus further comprises adjustable means on the belt for adjusting the belt for the individual’s comfort and fit.

One of the objectives of the present invention is to provide an affordable, portable, exercise apparatus that is simple and effective, easily fitted on an individual, which will improve the cardiovascular health by increasing the lung capacity of the individual with the benefits of engaging the oblique and bicep muscles while running.

Another advantage of the present invention is that the apparatus disclosed herein involves the passive workout for the oblique and bicep muscles when the hands of the individual grasp the hand grip elements installed on the back of the apparatus while running. The apparatus disclosed herein targets, strengthens, tones and adds definition to the oblique and bicep muscles. The apparatus ultimately increases the individual’s tolerance, endurance and strength while running.

Additional objectives of the present invention will appear as the description proceeds. The foregoing and other objects and advantages will appear from the description to follow.

In the description, references are made to the accompanying drawings, which forms a part hereof, and in which is shown by way of illustration specific embodiments in which the invention may be practiced. These embodiments will be described in sufficient details to enable those skilled in the art to practice the invention, and it is to be understood that other embodiments may be utilized and that structural changes may be made without departing from the scope of the invention. In the accompanying drawings, like reference characters designate the same or similar parts throughout the several views. The following detailed description is, therefore, not to be taken in a limiting sense, and the scope of the present invention is best defined by the appended claims.

**BRIEF DESCRIPTION OF THE DRAWINGS**

FIG. 1 shows an exercise apparatus in accordance with an embodiment of the present invention;

FIG. 2 is another embodiment of the present invention exercise apparatus;

FIG. 3 is yet another embodiment of the present invention exercise apparatus; and,

FIG. 4 is a present invention exercise apparatus shown in use with an individual wearer.

**DETAILED DESCRIPTION OF THE EMBODIMENTS**

Referring now in detail to the drawings wherein like reference numerals designate corresponding parts throughout the several views, various embodiments of the present invention are shown. Referring to FIG. 1, there is shown an embodiment of the present invention exercise apparatus 1. Exercise apparatus 1 includes a belt 3 with two ends 5, 7 wherein the belt 3 is mountable on the torso region of an individual wearer and the belt 3 is connectible to a pair of shoulder straps 9, 11. The belt 3 includes two ends wherein the belt is mountable on the torso region of an individual wearer, the belt having a rear portion for traversing a lower back of the individual wearer and a front portion for traversing a front portion of said individual wearer.

In some embodiments, the belt 3 includes securement means positioned at the ends 5, 7 of the belt 3 for adjustably securing the exercise apparatus 1 about the torso region of an individual. Securement means comprises any one or more of the following: buckle, hook and loop fastener, button, buttonhole, clip, zipper, hook and eye fastener, snap, a plurality of monofilament hooks in cooperation with a plurality of monofilament loops; a magnet, a thread and combinations thereof. The belt may be adjustable by virtue of a buckle type fitting, a ring and slide adjustment, or any other means for modifying the effective length of the belt 3 known and used in the arts. In some embodiments, the belt is formed from a firm but elasticized material, e.g. neoprene, suitable textile, cloth, fabric, leather, plastic, or tightly woven plastic for wearability and comfort against the individual’s skin. In some embodiments, the inner face of the belt 3 may be lined for comfort and wearability with velvet, cushion, foam, fabric or any other types of materials that are known and used in the arts. A pair of shoulder straps connected to a back support wherein each of said pair of shoulder straps includes two ends on each strap wherein at least one of said ends of each of said shoulder straps is connected to said belt and wherein another end of said shoulder straps is connected to a top portion of said back support wherein said shoulder straps may be expandable to a size for said individual wearer.

Exercise apparatus 1 further comprises a pair of shoulder straps 9, 11 connected to a back support 3 wherein each of the shoulder straps 9, 11 includes two ends 23, 25, 27, 29 on each strap wherein at least one of the ends of each of the shoulder straps is connected to the belt and wherein another end of the shoulder straps is connected to a back support member 19. The shoulder straps 9, 11 may be expandable to a size for the individual wearer. The back support 31 includes two apertures 25, 27 for the shoulder straps 9, 11 to be threaded through the back support top portion 31. In some embodiments, the shoulder straps 9, 11 are designed to be hung on both shoulders of an individual, extending from a rear portion of the apparatus 1 and extending from the rear portion of the exercise apparatus 1. In some embodiments, the shoulder straps 9, 11 are elasticized to provide a firm fit. In other embodiments, the shoulder straps 9, 11 comprise of adjustable means 33 on the shoulder straps 9, 11 for adjusting each of the shoulder straps 9, 11 for an individual wearer’s comfort and fit. Adjustable means may include, but is not limited to ring and slide adjustment, or any other adjustable means 33 that are known and used in the arts.

In some embodiments, the shoulder straps 9, 11 may be detachably connected to the belt by fasteners (not shown) such as but not limited to a buckle, hook and loop fastener, button, buttonhole, clip, zipper, hook and eye fastener, snap, a plurality of monofilament hooks in cooperation with a plurality of monofilament loops, a magnet, a thread, glue, sticky tack, any other means of attaching one object to another known and used in the arts, and combinations thereof.

Exercise apparatus 1 includes the back support member 19 positioned between and connecting to the pair of shoulder straps 9, 11 in the rear portion of the apparatus and wherein at least one of said back support member 19 and said pair of shoulder straps 9, 11 is connected to said rear portion of said belt 3 whereby said back support member 19 is mountable against said back region of said individual wearer. The
back support member 19 may be formed from one or more materials consisting of the following suitable textile, cloth, fabric, plastic, metal, sturdy rigid or semi-rigid material. In some embodiments, the back support member 19 is elastized. In other embodiments, the back support member 19 is securely affixed to the shoulder straps 9, 11 by stitches, buttons, magnets, a clip, hook and loop fastener, a zipper, glue or any other means of securing each other object to another. In some embodiments, the back support member 19 is detachably fixed to the shoulder straps 9, 11 by seams of the back support member 19. The seams are in mating arrangement with the shoulder straps wherein any means of attaching one object to another known and used in the arts. In other embodiments, back support member 19 is securely affixed to the shoulder straps 9, 11. The back support member 19 may be an assembly of parts, but is preferably a single unistructural element, i.e., a single element, such as a single molded or cast piece. It may be rigid, semi-flexible or partially semi-flexible. In one embodiment the hand grip elements are flexible or semi-flexible to provide arcing during exercises.

The exercise apparatus 10 includes at least one stationary hand grip element, but here two are included, hand grips 35, 37 connected and extending from the back support member 19 mountable on a back of the individual wearer and including the back support member 19 having a relatively elongated base 39 wherein the hand grip elements 35, 37 are sized and shaped to grasp the individual wearer and further sized and shaped to retain the individual wearer’s hands in an immovable position behind the individual wearer’s neck.

The apparatus further comprises securment means positioned on the ends of the belt for adjustable securing the apparatus about torso region of the individual wearer. The securment means is selected from the group consisting of a buckle, hook and loop fastener, button, buttonhole, clip, zipper, hook and eye fastener, snap, a plurality of monofilament hooks in cooperation with a plurality of monofilament loops, a magnet, a thread and combinations thereof.

The at least one hand grip element 35, 37 is formed of a material selected from the group consisting of moldable material, cloth, wool, elastic, cotton, nylon, plastic, polymer, rubber, silicone, metal, padding, cushion, foam, synthetic fabric, neoprene, anti-slip fabric, anti-slip fabric, insulation, and combinations thereof. The hand grip element 35, 37 is securely affixed to the back support by fixation means 41. The fixation means may be a patch or any other type of fixation means known in the art.

In some preferred embodiments of the present invention apparatus for activating different muscles, the belt 3, the hand grip elements 35, 37 and the shoulder straps 9, 11 are elasticized and stretchable. In other preferred embodiments of the present invention apparatus for activating different muscles 1, the apparatus 1 further comprises adjustable means 33 on the belt 3 for adjusting the belt 3 for the individual’s comfort and fit.

FIG. 2 shows another embodiment of the present invention exercise apparatus 10 wherein most of the elements are identical to those of FIG. 1, and hence are identically numbered and need not be repeated here in detail. However, the two hand grips have been eliminated. Top section 201 of the back support member 19 now has a single hand grip 203 with a top flange 205, as shown. This single hand grip 203 may be gripped with one hand or with both (hand atop hand or hand above hand) and elbow butterfly exercises may be performed by a user, e.g., while jogging. Alternatively, hand grip 203 may be flexible and arcing or rotating arm exercises may be performed.

FIG. 4 shows an individual 500 wearing exercise apparatus 40 according to one embodiment of the present invention while running. The rear portion of exercise apparatus 40 is shown. Exercise apparatus 40 includes the belt 410 mounted on the torso region of an individual and connected to a pair of shoulder straps in the front (hidden), that are hung on both shoulders of the individual and are connected to a back support member 402. Back support member 402 has a bottom portion 406 with slots for belt 410, as shown. The top portion 404 of back support member 402 is connected to the tops of the shoulder straps mentioned above (also hidden). Extending from top portion 404 are hand grips 412 and 414. Hands 501 and 503 of individual 500 are gripping hand grips 412 and 414 respectively as shown, while she is running. She may flex hand grips 412 and 414 in a wishbone exercise wherein she will move her elbows toward her ribs and then cyclically away from and then returning toward her ribs. Alternatively, she may flex her elbows forward and backward in a butterfly exercise without moving hand grips 412 and 414.

In general, when using the present invention and when the hands of the individual grasp the handle grip elements on the rear portion of the apparatus, the individual’s hands may be held stationary behind the neck while running. This activates the oblique and bicep muscles, thereby providing a passive workout for these muscles while running, where the individual’s natural body weight is the only resistance. The handle grip elements permit the arms to be raised up over the individual’s head and the hands held stationary behind the neck, exposing the oblique muscles, increasing the tension and stress on the oblique muscles, and at the same engaged and exposed the bicep muscles to the natural stress and tension, for the duration of time that the individual is running. Thus the apparatus disclosed herein targets, strengthens, tones and adds definition to the oblique and bicep muscles.

All of the devices herein may be used as described in conjunction with present invention exercise apparatus above.

Although particular embodiments of the invention have been described in detail herein with reference to the accompanying drawings, it is to be understood that the invention is not limited to those particular embodiments, and that various changes and modifications may be effected therein by one skilled in the art without departing from the scope or spirit of the invention as defined in the appended claims.

What is claimed is:
1. An apparatus for activating particular muscles, comprising:
   a) a belt with two ends wherein said belt is mountable on the torso region of an individual wearer, said belt having a rear portion for traversing a lower back of said individual wearer and a front portion for traversing a front of said individual wearer;
   b) a pair of shoulder straps connected to a back support wherein each of said pair of shoulder straps includes two ends on each strap wherein at least one of said ends of
each of said shoulder straps is connected to said belt and wherein another end of said shoulder straps is connected to a top portion of said back support wherein said shoulder straps may be expandable to a size for said individual wearer;

c) said back support positioned between and connecting to said pair of shoulder straps in a rear portion of said apparatus and said back support connecting to said belt through a back support connection means whereby said back support is mountable against said back region of said individual wearer; and,

d) at least one stationary hand grip element connected and extending from said back support mountable on back of said individual wearer and including said back support having a relatively elongated base wherein said at least one hand grip element is sized and shaped to be grasped by said individual wearer and further sized and shaped to retain said individual wearer’s hands in an immovable position behind said individual wearer’s neck.

2. The apparatus for activating different muscles of claim 1 wherein there are two stationary hand grip elements connected and extending from said back support.

3. The apparatus for activating different muscles of claim 1 wherein said apparatus further comprises securement means positioned on said ends of said belt for adjustably securing said apparatus about torso region of said individual wearer.

4. The apparatus for activating different muscles of claim wherein said securement means is selected from the group consisting of a buckle, hook and loop fastener, button, button hole, clip, zipper, hook and eye fastener, snap, a plurality of monofilament hooks in cooperation with a plurality of monofilament loops, a magnet, a thread and combinations thereof.

5. The apparatus for activating different muscles of claim 1 wherein each of said pair of shoulder straps are configured to be hung each on one shoulder of said individual wearer, extending from the rear of said apparatus to a front portion of said apparatus.

6. The apparatus for activating different muscles of claim 1 wherein said apparatus further comprises adjustable means on said shoulder straps for adjusting each shoulder strap for said individual wearer’s comfort.

7. The apparatus for activating different muscles of claim 1 wherein said at least one hand grip element is formed of a material selected from the group consisting of moldable material selected from the group consisting of cloth, wool, elastic, cotton, nylon, plastic, polymer, rubber, silicone, metal, padding, cushion, foam, synthetic, fabric, neoprene, anti-slip fabric, anti-slide fabric, insulation, and combinations thereof.

8. The apparatus for activating different muscles of claim wherein said hand grip element is securely affixed to said back support by fixation means.

9. The apparatus for activating different muscles of claim wherein said belt, said hand grip element and said shoulder straps are elasticized and stretchable.

10. The apparatus for activating different muscles of claim 1 wherein said apparatus further comprises adjustable means on said belt for adjusting said belt for said individual’s comfort and fit.

11. An apparatus for activating particular muscles, comprising:

   a) a belt with two ends wherein said belt is mountable on the torso region of an individual wearer, said belt having a rear portion for traversing a lower back of said individual wearer and a front portion for traversing a front of said individual wearer;

   b) a pair of shoulder straps connected to said back support wherein each of said pair of shoulder straps includes two ends on each strap wherein at least one said end of each of said shoulder straps is connected to said belt and wherein another end of said shoulder straps is connected to a top portion of said back support whereby said shoulder straps may be expandable to a size for said individual wearer;

   c) said back support positioned between and connecting to said pair of shoulder straps in a rear portion of said apparatus and said back support connecting to said belt through a back support connection means whereby said back support is mountable against said back region of said individual wearer, said back support being a single unistructural element; and,

   d) at least one stationary hand grip element connected and extending from said back support mountable on back of said individual wearer and including said back support having a relatively elongated base wherein said at least one hand grip element is sized and shaped to be grasped by said individual wearer and further sized and shaped to retain said individual wearer’s hands in an immovable position behind said individual wearer’s neck.

12. The apparatus for activating different muscles of claim 11 wherein there are two stationary hand grip elements connected and extending from said back support.

13. The apparatus for activating different muscles of claim 11 wherein said apparatus further comprises securement means positioned on said ends of said belt for adjustably securing said apparatus about torso region of said individual wearer.

14. The apparatus for activating different muscles of claim 13 wherein said securement means is selected from the group consisting of a buckle, hook and loop fastener, button, button hole, clip, zipper, hook and eye fastener, snap, a plurality of monofilament hooks in cooperation with a plurality of monofilament loops, a magnet, a thread and combinations thereof.

15. The apparatus for activating different muscles of claim 11 wherein said apparatus further comprises adjustable means on said shoulder straps for adjusting each shoulder strap for said individual wearer’s comfort.

16. The apparatus for activating different muscles of claim 11 wherein said apparatus further comprises adjustable means on said shoulder straps for adjusting each shoulder strap for said individual wearer’s comfort.

17. The apparatus for activating different muscles of claim 11 wherein said at least one hand grip element is formed of a material selected from the group consisting of moldable material selected from the group consisting of cloth, wool, elastic, cotton, nylon, plastic, polymer, rubber, silicone, metal, padding, cushion, foam, synthetic, fabric, neoprene, anti-slip fabric, anti-slide fabric, insulation, and combinations thereof.
20. The apparatus for activating different muscles of claim 11 wherein said apparatus further comprises adjustable means on said belt for adjusting said belt for said individual’s comfort and fit.