

SCUBA FITNESS

Dive Fitness at Any (Every) Age



Gretchen M. Ashton, CFT, NBFE is an advanced diver, personal trainer, biomechanic strength trainer and fitness therapist. Specializing in lifestyle fitness she launched the concept of Scuba Fitness developing the

FitDiver® program and ScubaFit®, which are dedicated to improving the health and fitness of all scuba divers. Gretchen has presented at the Scuba Show in Long Beach, teaches the physical fitness module for Los Angeles County Scuba Advanced Diver Program, and was recently recognized by the President's Council on Physical Fitness and Sports for inspired accomplishments and advancements in fitness. For more information or questions contact: www.scubafit.com, gretchen@scubafit.com.



The Rosenkranz Family

By Gretchen Ashton

THE CURRENT LIFE EXPECTANCY IN THE UNITED STATES IS 78.24 YEARS. Just think about it. *A diver certified at 20 years of age has the potential for more than 50 years of scuba diving.* During this diving lifespan many biological changes will occur. Beginning in early adulthood all body systems begin to lose capacity; muscle strength decreases, cardiovascular capacity diminishes, and body composition changes. Clearly illness should not be confused with aging, however, changes in the body due to aging are of the greatest concern when combined with illness, injury or a sedentary lifestyle. There are many theories of aging, but only physical activity is wholly agreed to reverse the effects of aging. As with diving, there are also risks associated with exercising. Fortunately the benefits of a fitness lifestyle outweigh the risks associated with exercise and greatly reduce the risks associated with diving. As the body ages, workouts can be modified to minimize risk and maximize results. Exercise is the great equalizer. *A fitness lifestyle may extend biological health by as much as 20 years.* The sooner divers begin a physical fitness program the greater the benefits and all divers can improve their health at any (every) age.

DIVE FITNESS IN THE 20'S AND 30'S

It is generally believed that physically vitality and biological functions peak in early adulthood. Muscle strength is greatest around age 25 providing an opportunity to build on the physical fitness of youth to establish a strong foundation for future health and wellness. Lean muscle mass supports the skeleton, burns calories even at rest, and provides the body the strength required for daily and recreational activities of a healthy lifestyle. Both men and women can maximize biological function in the 20's with weight training workouts of one-hour to 90-minutes several times a week focusing specifically on increasing the size of the muscles. Cardiovascular fitness can be maintained in shorter higher intensity workouts of perhaps 20-minutes of running. Resting metabolism is efficient and good nutrition is required to fuel higher intensity workouts. An important direct benefit of physical fitness for diving in the 20's relates to dive safety. In addition to increased energy, the mental concentration required with intense workouts is known to produce clear thinking, self confidence, and improved self-esteem.

In the 30's physical activity may become derailed with the responsibilities of family and work, but this can be turned into a positive. Changes in the body trend favorably toward outdoor activities such as biking and hiking that are easily shared with family. During this stage, muscle strength declines slowly and with the addition of mental and emotional maturity, some of the best physical performance is experienced in work-related physical activities such as golf. Fitness priorities shift to maintaining muscles mass, cardiovascular health and flexibility. Different interests, lifestyles, goals and fitness levels direct men and women, the active and inactive, and the injured into specialized workouts. If fitness level is well established, high

intensity workouts are still appropriate. Flexibility becomes more important and should be performed at the end of each exercise session for 20 minutes for every 40-minutes of weight training. The 30's may be the beginning of a 10 to 20 pound weight increase. Aerobic exercise may still be performed separately from weight training, but combining the workout saves time and facilitates weight loss. For an efficient weight loss workout that is also well-suited to scuba fitness, warm up with 10-minutes of aerobic exercise followed by 20-minutes of strength training, 30-minutes of aerobic exercise and 10 minutes of stretching four to five times each week. Neglecting fitness in the 30's can be deceptive since evidence of disuse and aging doesn't begin to show yet. Importantly, staying fit in the 30's has the greatest preventative potential for extending diving lifespan.

DIVE FITNESS IN THE 40'S AND 50'S

In the 40's men continue to get results from fewer, shorter and higher intensity workouts, while women begin to →

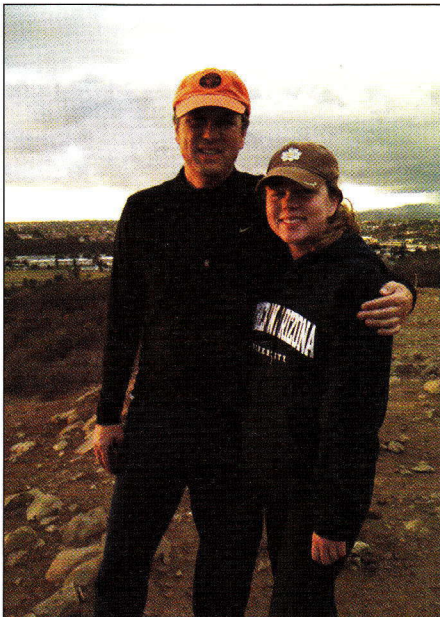
"In addition to increased energy, the mental concentration required with intense workouts is known to produce clear thinking, self confidence, and improved self-esteem."



Andrew (left) and Christian (below) Rosenkranz. For divers in their teenage years, organized sports are a great way to develop and maintain fitness for scuba diving.



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Brent and Christie Rosenkranz. Brent had disc surgery on his back about five years ago. Prior to the disc problem he was an avid jogger. Since then he has been able to build up to a rigorous one-hour and 15-minute walk that he takes each day, which includes going up to the top of Mt. Calaveras.

“Exercise also alleviates stress and the symptoms of depression.”

benefit more from frequent, longer and more moderate workouts. Weight gained is not as easy to lose and nutritional changes must be made to stimulate metabolism. A balanced workout includes a combination of aerobic exercise, strength training and stretching with a focus on getting the most from the workout while avoiding injury. The 40's are an important time to stay alert and knowledgeable about overall health. Beginning in the 40's, especially as divers, it is prudent to get a thorough physical examination each year and to follow the guidelines recommended for baseline health assessments and screenings. With early detection, many medical conditions can be reversed and at least well-managed with the lifestyle modifications of exercise and good nutrition. Setbacks in the 40's can lead to falling off of a fitness regime altogether simply from discouragement. Exercise also alleviates stress and the symptoms of depression. To stay on track, try new forms of exercise or a combination of activities to maintain interest. For divers, cardiorespiratory health remains primary and aerobic exercise should continue at least three times a week for 30 minutes or more. If injured, find ways to maintain at least the cardiorespiratory system and ideally the rest of the body while the injured part is rehabilitating. **Physical fitness for diving in the 40's is best accomplished with total body circuit training, supersets, cross-training and interval training. These total body workouts, use less resistance, burn more calories, provide variety, allow for better recovery, save time and may be performed at individual fitness levels.**

The next decade should be called the 50/50. Some divers in the 50's are in excellent health and continue to perform workouts at individual levels similar to the exercise programs of their 30's and 40's. Others are just discovering exercise for the first time and usually after injury or illness. Transitions from physical therapy programs into fitness lifestyles

are common and personal trainers are especially beneficial. Exercise protocols focus on correcting or managing medical conditions such as high blood pressure, obesity and diabetes. Women rely on exercise to help minimize the symptoms of menopause and maintain bone density. In the 50's physical fitness for diving is best maintained with moderate aerobic and strength training activity every day. Weight training workouts split to different muscle groups on alternating days to avoid overuse and provide for better recovery. Modifications associated with wear and tear on the joints are recommended; perform walking instead of running, try swimming, switch to low impact aerobics, and specialty classes such as Pilates. It is important to do whatever it takes to remain active and eat well. Physical fitness in the 50's is paramount in reducing the risks associated with aging and scuba diving.

Dive Fitness in the 60's and 70's

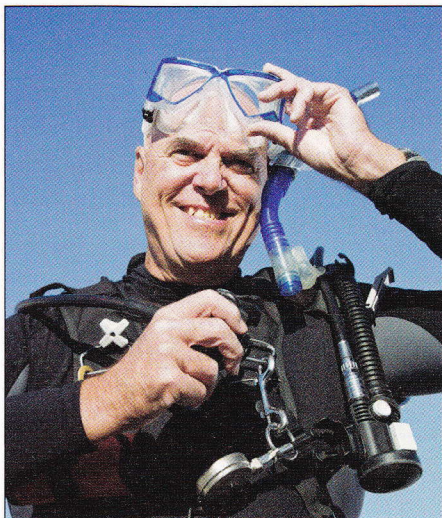
Eventually, the effects of aging begin to manifest to some degree regardless of a fitness lifestyle, but biological health varies greatly among divers. Many are healthier now than they were in their 50's and with more free time after retirement enjoying life becomes very important. Physical activity is often motivated by and achieved through hobbies such as gardening, dancing and golf. During the 60's divers require structured exercise in addition to other forms of physical activity to continue the safest and most pleasurable diving activity. Consistency is more important than intensity and preventing injury is important because setbacks may require a longer recovery greatly compromising quality of life. Moderate total body workouts including aerobic exercise, strength training and stretching are recommended three times each week in addition to fitness hobbies.


Chronologically speaking, with increasing age, body activity diminishes and at individual milestones maintaining daily activities becomes the best

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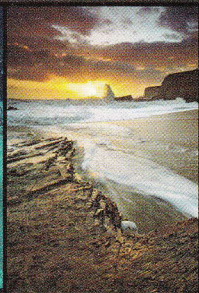
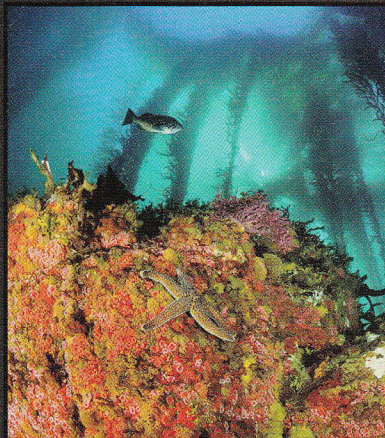
indicator of physical fitness. However, a fitness lifestyle establishes physical reserve; a combination of healthy habits and spontaneous responses of physical activity. In the 70's and beyond, workouts may include programs for divers with arthritis, stretching programs are directed toward preventing falls and injury, and mind body exercise such as tai chi becomes especially beneficial. Biological health (not chronological health) dictates almost everything including diving activity and, as always, decisions about diving are best made with the advice of a physician. Divers in their 70's are most likely those with high physical reserve and very good biological health younger than their years.

Now is a great time to get fit for diving – and regardless of your age or conditioning level, you can improve your health and be more fit for diving by beginning a fitness program today! 📺





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