The Importance of Health and Wellness for Individuals with Autism and Intellectual Disabilities

Before We Begin...Let’s Stretch
Why Should We Stretch?

Why Stretching Is Important

In regard to the human body, stretching allows you to become more flexible. It increases your range of motion, allowing you to do much more while working out. Your posture can also be affected in a positive way when you do appropriate stretching on a daily basis.

More info on:
http://kadoreshealthclub.com/classes/

What is SOS Health Care?

SOS Health Care, Inc was formed in 1989 and is a 501(c)(3) nonprofit organization.

The mission of the organization:
To partner with our community to provide hope, care, and assistance to our neighbors.
Programs Provided by SOS Health Care

- ABA Therapy
- A.C.E. (Autism Community Education)
- Career Camp
- College Mentor
- Dogs for Disabilities
- Fit for Life
- Friday Knights
- Independent Living Skills
- Job Coach Program
- Project Lifesaver
- SOS Summer Camp
- Social Skills Groups for all ages
- Oak Tree Farm, a community under construction

One of our partnership groups from a local high school.
Meet Our Staff

Sarah Pope
Executive Director SOS Health Care, Inc.

I received my degree in Social Work while living in England. I have worked in the field serving individuals with disabilities for 35 years in various roles. I love to create new programs that address unmet needs. I’m also the parent of two young men with Autism that also have several medical conditions.

Meet Our Staff

Diane Owens, Program Coordinator
Fit for Life
SOS Health Care, Inc.

Diane was chosen by her boss to be the Program Coordinator for Fit for Life due to her healthy lifestyle changes. While being employed with SOS Health Care, Inc. Ms. Owens has lost approximately 80lbs and has made very healthy lifestyle changes that have drastically improved her quality of life. She was the natural fit for this position because she experienced health and wellness changes from a personal point of view. Over the course of her lifestyle change Ms. Owens learned a great amount about fitness, proper form, weight loss, weight maintenance, healthy eating, portion control, hydration, and eating for your body type and blood type. She visited various doctors and wellness centers to learn and implement scientific procedures to obtain maximum wellness.

While doing Fit for Life Ms. Owens has been able to educate and empower teens and young adults on the importance of fitness, nutrition and overall wellness and has seen a big change in the quality of life of these young adults.
Meet Our Staff

Heather Hardee, Fit for Life Assistant Instructor

My name is Heather Hardee and I am 26 yrs old. I was born at Conway Hospital in Conway SC. I live with my dad, stepmom and my step sister. I attended Conway Christian School and graduated with the Class of 2010. I have a learning disability and seizures. I want to become a nurse in the future. I like helping people and making people feel better. I have experience taking care of people. I like to be healthy by eating right and exercising. Since I live at the beach I want to have a beach body.

Fit for Life has helped me become independent and eat better and healthier. Some healthy foods I like to eat include fruits, veggie straws, and frozen yogurt. Some things in Fit for Life that I have learned are portion control, the importance of hydration, and the negative effects of fast food.

My favorite kind of exercises are sit-ups and running. My personal training was at Planet Fitness. I saw the last Fit for Life assistant help lead the team, and soon I will take her place. As the new assistant I will help make exercising fun, I want to help make the class aware of making healthy choices.
Karate Class at Sky Fitness

Practicing the kick. Sommer demonstrates for the group.

Disability and Health

- Individuals with disabilities represent 18.7% (about 56.7 million people) of the U.S. population.
- Over a billion people, about 15% of the world’s population, have some form of disability.

1) Less likely to receive recommended preventive health care services, such as routine teeth cleanings and cancer screenings
2) At a high risk for poor health outcomes such as obesity, hypertension, falls-related injuries, and mood disorders such as depression
3) More likely to engage in unhealthy behaviors that put their health at risk, such as cigarette smoking and inadequate physical activity.
Unmet Needs for Health Care

Health promotion and prevention activities seldom target people with disabilities.

For example women with disabilities receive less screening for breast and cervical cancer than women without disabilities.

People with intellectual impairments and diabetes are less likely to have their weight checked.

Adolescents and adults with disabilities are more likely to be excluded from sex education programs.

How are the lives of people with disabilities affected?

People with disabilities are particularly vulnerable to deficiencies in health care services. **Secondary conditions**

Secondary conditions occur in addition to (and are related to) a primary health condition, and are both predictable and therefore preventable. Examples include pressure ulcers, urinary tract infections, osteoporosis and pain.

- Co-morbid conditions
- Age-related conditions
- Engaging in health risk behaviors
- Higher rates of premature death
Barriers to Health Care

People with disabilities encounter a range of barriers when they attempt to access health care including the following.

- Prohibitive costs
- Limited availability of services
- Physical barriers
- Inadequate skills and knowledge of health workers

What is Fit for Life?

Fit for Life is an evidence-based fitness and health program in the Horry County area of South Carolina. It has enabled over 50 adults with disabilities between the ages of 16 and 35 to participate in a specialized fitness and nutrition class. The planning of the program was developed with input from several young adults with disabilities. The fitness class is held weekly at a local fitness center, paired with support from a nutritional consultant and grocery shopping support through a program coordinator.
Why Fit for Life?

We now know, beyond doubt, that for many people, autism is a whole-body disorder. (Bolton 2009, Croen 2015) Its frequent co-morbidities include seizures, gastrointestinal disorders, sleep disturbances, eating and feeding challenges, attention deficit and hyperactivity disorder (ADHD), anxiety, depression, schizophrenia and bipolar disorder.

Of the studies examining this troubling issue, the most recent found the average life span of someone with autism to be half that of the general population – an average of 36 versus 72 years. (Guan 2017) Autism itself is not a cause of premature mortality. Rather, research suggests that it relates to many of the medical and mental health conditions in this report, most of which are treatable and some – such as obesity, depression and anxiety – potentially preventable with greater understanding and support.

Sommer assisting with sit ups
**Why Fit for Life?**

**Teaching proper Nutrition is a MUST!!!**

Children with autism are nearly eight times more likely to suffer from one or more chronic GI problems than are typically developing children.

Since the late 1990s, researchers have been adding to the evidence that unhealthy changes in the intestinal tract’s normal community of digestive bacteria (the microbiome) drive both behavioral and GI problems in some people on the autism spectrum. The first reported person to make this gut–brain connection was the mother of a child with autism, Ellen Bolte, who saw a parallel between her son’s symptoms and infant botulism. (Bolte 1998)

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**Why Fit for Life?**

In 2015, researchers with Oregon Health & Science University found that the tendency for unhealthy weight gain starts surprisingly early in life for children affected by autism. Of the 5,053 children with autism in the study, nearly a third (32 percent) of 2 to 5 year olds were overweight, compared to less than a quarter (23 percent) of 2- to 5-year-olds in the general population. Sixteen percent of 2- to 5-year-olds with autism were medically obese, compared to 10 percent of 2- to 5-year-olds in the general population. The investigators found that the likelihood of being overweight or obese increased with the number of psychoactive behavioral medicines a child or teen was taking. Some of these children were taking as many as five. (Hill 2015)
Teaching and Understanding Nutrition
Fit for Life gives participants, families and staff a better understanding of common GI problems that occur in children with Autism. They may include specific issues such as:
- Chronic Constipation
- Chronic Diarrhea
- Gastroesophageal reflux disease (GERD)

Several contributors to these chronic issues may include:
- Diets that provide insufficient fiber, which some research suggests are particularly common with gluten-free diets as well as highly restricted diets associated with sensory aversions. (Miranda 2014, Graf-Myles 2013)
- Behavioral medications including risperidone. (De Hert 2011)
- Sensory and/or behavioral issues that interfere with regular toileting. (Dalrymple 1992)

The Importance of Fiber in Your Diet
Dietary fiber — found mainly in fruits, vegetables, whole grains and legumes — is probably best known for its ability to prevent or relieve constipation. But foods containing fiber can provide other health benefits as well, such as helping to maintain a healthy weight and lowering your risk of diabetes and heart disease.
Why Fit for Life?

At Fit for Life, students get a workout and nutrition class-including visits from fitness specialists, physical therapists, occupational therapists, and certified nutritionists/dieticians. The classes are expertly tailored to the student’s developmental skills and comfort levels.

Areas of improvement may include:
- Functional movement
- Gross motor function and coordination
  - Crossing the midline
  - Mental processing
- Motor planning and motor sequencing
  - Hand-eye coordination
  - Locomotor skills
- Visual motor/perceptual motor skills
- Proprioception and balance
- Age-appropriate social skills

Working on nutrition and relaxation
Creating Fit For Life

The program was designed based on an unmet need in our community. Many of the individuals that we serve have succumbed to the electronic era and are inclined to more sedentary behavior. Paired with fast food and available snacks while gaming many of our young adults started gaining weight. The limited opportunity to join a gym and feel comfortable attending became an obstacle that needed to be changed. We started with a trial at the City Of Myrtle Beach’s Recreation Center and built from there.

Fit for Life

Join us for an evidence-based health program for adults with disabilities between the ages of 16-35. Caretakers and therapists are welcome! Our fitness instructor and nutritional consultant will ensure that we are indeed FIT FOR LIFE!

• Summer Start Date: Tuesday June 13, 2017
• Time: 10:15a-11:30a
• Location: Sky Fitness 9526 Highway 707
  Myrtle Beach, South Carolina, SC 29588

Get fit in our exercise class led by a certified instructor. Then, work with a nutritionist on implementing a healthy lifestyle. We are accepting new participants now.

Please call 843-449-0554 or email fitforlife@soshealthcare.com for an application.
Danielle, Our Assistant Instructor Teaches the Class How to Do a Lunge

Funding for Fit For Life

- We received a grant from the SC Disabilities Council to get the program started.
- An application process was put into place and the advertising began among other disability organizations and our public school system.
- Our Partnership with Coastal Carolina University gave us access to Health Promotion interns that wanted to help us get started with some lesson plans.
- Our partnership with Clemson Extension allowed us to work with their nutritionist and have them join the project.
Working outside an important part of fitness

Growing organic food in our Independent living program
Resources

- Our previous work in the community offered us the many opportunities with access to fitness instructors and health care experts. Before long, lesson plans and new activities were being created as we learned about the needs and functioning levels of the groups attending the program.
- Our local public school district began to offer Fit For Life to the students in self-contained classes and bussed them to our various gyms where activities were provided. Many schools don’t offer adaptive P.E. or other fitness classes to those with disabilities.

Meet the Students of Carolina Forest High School
Autism and Feeding/Eating Issues

A recent review of diagnostic records found that an estimated 70 percent of children on the autism spectrum have feeding and/or eating problems; 36 percent of these had problems classified as “severe.” (Romero 2016)

- **Chronic overeating** is a common issue among both children and adults on the autism spectrum. Some people with autism have poor sensitivity to internal cues such as feeling full. Autism-related aversions to strong flavors, textures and smells can lead to overconsumption of high-calorie, low-nutrient foods.

- **Pica**, the dangerous habit of eating nonfood items, is another feeding disorder long associated with autism.
What’s On My Plate?

Interagency Coordination

As a leading provider of services to the developmentally disabled along the South Carolina coast, SOS has a tradition of involving other agencies and community groups in its projects. Some of these agencies include:

- Department of Disabilities and Special Needs
- South Carolina Autism Society
- Grand Strand Down Syndrome Society
- Horry County School System
- Grand Strand Miracle League
- Horry County Special Olympics
- Coastal Carolina LIFE Program
- Horry Georgetown Technical College
Fit for Life participants at their first 5K

Community Partnerships

- The SC Wellness Council
- Clemson Extension
  - Mega Fitness
  - Sky Fitness
  - Wicked Fitness
  - Gold’s Gym
- Conway Medical Center
  - Discover Wellness
  - Pump Café
  - Mon Café
- Rockin Jump Myrtle Beach
  - Clean Eatz
  - Horry County 4-H
  - The Karate Studio
- Pepper Geddings Community Center
- Burro Loco Stache and Dash 5K
- Myrtle Beach Turkey Trot
The success of SOS’s Fit for Life program is astounding. The grant has required 20 participants to be enrolled over the course of the fiscal year and SOS has now tripled that number. Our current total of participants is 64. As a result of the popularity of the program, SOS has began offering a second Fit for Life class.

Having a second class has allowed SOS to accept more participants. It has also allowed SOS to educate other local fitness centers on the needs of individuals with Autism and related disabilities. This has broadened awareness and acceptance in the community.
What Do We Learn in Fit for Life?

**What Happens to Your Body When You Eat**

### SUGAR

Shop away from the candy, and take a closer look: how much sugar do you think affects your body?

<table>
<thead>
<tr>
<th>Hand Symbol</th>
<th>Equivalent</th>
<th>Foods</th>
<th>Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fist</td>
<td>1 scoop</td>
<td>Rice, pasta, fruit, veggies</td>
<td>200</td>
</tr>
<tr>
<td>Palm</td>
<td>3 ounces</td>
<td>Meat, fish, poultry</td>
<td>360</td>
</tr>
<tr>
<td>Handful</td>
<td>1 ounce</td>
<td>Nuts, raisins</td>
<td>170</td>
</tr>
<tr>
<td>2 Handfuls</td>
<td>1 ounce</td>
<td>Chips, popcorn, pretzels</td>
<td>220</td>
</tr>
<tr>
<td>Thumb</td>
<td>1 teaspoon</td>
<td>Peanut butter, hard cheese</td>
<td>170</td>
</tr>
<tr>
<td>Thumb tip</td>
<td>1 teaspoon</td>
<td>Cooking oil, maple syrup, sugar</td>
<td>45</td>
</tr>
</tbody>
</table>

SHAPE

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**Try this...**

- **CRAVING THIS...**
  - Want: candy, ice cream, chips, etc.
  - Try: fruits, nuts, vegetables, or a healthy snack.

**MORE CURES FOR YOUR CRAVINGS!**

**YOU WANT:**
- Sweet
- Salty
- Crunchy

**TRY:**
- Fresh grapes
- Crispy & salty snacks
- Corn & rich

**PAYOFF:**
- Candy is sweet, but it can cause a spike in your blood sugar and leave you feeling hungry again.
- Chips are high in calories and fat, while vegetables are low in calories and rich in nutrients.
- Ice cream is a high-calorie, low-nutrient food that can lead to weight gain.

**DIY Microwave Popcorn**
- Mix 1/2 cup popcorn kernels with 1 tablespoon olive oil and 1 teaspoon salt.
- Gradually add popcorn kernels to the bowl and microwave in 1-minute intervals.

**MORE CURES FOR YOUR CRAVINGS!**

- **YOU WANT:**
  - Sweet
    - Ice cream
  - Salty
    - Chips
  - Crunchy
    - Popsicles

- **TRY:**
  - Fresh fruits
  - Whole grain crackers
  - Hummus and veggies

- **PAYOFF:**
  - Ice cream is high in sugar and fat, but it can be a good source of protein and healthy fats.
  - Chips can be a good source of fiber, but they are high in calories and fat.
  - Popsicles are a good source of sugar and can be a good source of hydration.

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You Just Realized...

Whoever snuck the s in "fast food" was a clever person.

@youjustrealizedd

What Do We Do in Fit for Life?

<table>
<thead>
<tr>
<th>Fit for Life Initial Fitness Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>Exercise:</td>
</tr>
<tr>
<td>Jumping Jacks</td>
</tr>
<tr>
<td>Air Squat</td>
</tr>
<tr>
<td>Sit-Ups</td>
</tr>
<tr>
<td>Push-Ups</td>
</tr>
<tr>
<td>Step-Ups</td>
</tr>
</tbody>
</table>
What Do We Do in Fit for Life?

DO THIS WORKOUT every morning
wake up, get moving.

10 jumping jacks  
10 squats  
10 calf raises  
10 side reaches  
10 lunges  
10 jumping jacks  
10 squats

SUN SALUTATION FOR KIDS

Look up at the sky
Say: "Hello, nature is the best!"

Pretend to be a jellyfish
Start with your limbs straight out in front of you, then bend your knees and swing your hands out to the sides. Say: "Hello, dolphins are the best!"

Pretend to be a cockroach
Lie on your back on the floor and swing your legs out to the sides. Say: "Hello, insects are the best!"

Pretend to be a crab
Tuck your body into a ball, lift your knees, and then move them around. Say: "Hello, animals are the best!"

Pretend to be an archer
Pretend you are shooting an arrow. Say: "Hello, archery is the best!"

Reprise the steps back to standing. Then repeat the sequence on the left side.

Printable yoga poster
What Do We Do in Fit for Life?

Impact and Accomplishments

The major accomplishments of Fit for Life has included an increase in the fitness and health level of 50+ individuals with disabilities and their care takers. The participants will have a greater understanding of food choices that will prevent secondary diseases and give them a better understanding of obesity and its effects on an individual.

Awareness of limited fitness opportunities will help the community in planning for our population in the future by understanding the need to implement programs that cater to people with disabilities. By having people with disabilities attend local fitness centers, regular barriers will be broken and acceptance will begin. Inclusion is more likely to happen once fitness instructors and the population becomes familiar with our program and the needs of our group.
CERTIFICATE OF AWESOMENESS

PROUDLY PRESENTED TO: ____________________________________________

PRESENTED BY: __________________________________ DATE: ____________

FIT FOR LIFE

Have so much fun that you forget you’re exercising.
Resources

**Autism and GI disorders**
* Autism Speaks office hours with Dr. Buie.  
  A series of video interviews and follow-up Q&A’s with autism-GI specialist  
  Timothy Buie
* The ATN/AIR-P Guide for Managing Constipation in Children: A Tool Kit for Parents
* Autism and Toilet Training: A Parent’s Guide

**Autism and restricted eating**
* Exploring Feeding Behavior in Autism: A parent’s guide
* A model program for autism-related feeding disorders
* Seven ways to help a picky eater with autism
* Encouraging picky eaters with autism to try new foods
* Autism and mealtime: A therapist’s top ten tips for success
* Autism & eating challenges: You are not alone!
* When medical issues complicate autism’s eating challenges
* Will eating-disorder program help with autism-related food aversions?

Resources

**Autism and overeating/obesity:**
* How can we stem weight gain related to behavioral medications for autism?
* Autism and weight gain: How to stop teen’s progression from chubby to obese
* Autism and obesity: When exercise and healthy diet aren’t enough
* Sports, exercise and the benefits of physical activity for individuals with autism
Cupid Shuffle Tutorial

Cupid Shuffle Song