



SOS Health Care Fit for Life

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

Before We Begin...Let's Stretch

STRETCHING
PRE-WORKOUT 10-20 SEC EACH

1. dynamic chest 2. triceps 3. shoulder
4. groin and back 5. standing toe 6. calf hands against wall

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The complex block contains a graphic titled 'STRETCHING PRE-WORKOUT 10-20 SEC EACH'. It features six numbered illustrations of stretching exercises. Each illustration shows a person performing a specific stretch, with a small anatomical diagram above it indicating the target muscle group. The exercises are: 1. dynamic chest (arms extended horizontally), 2. triceps (one arm bent behind the head), 3. shoulder (one arm bent at the elbow with the hand near the shoulder), 4. groin and back (sitting on the floor with legs pulled towards the chest), 5. standing toe (standing with one leg raised and the foot pulled towards the body), and 6. calf hands against wall (standing with one leg against a wall and the hands against the wall). At the bottom of the graphic, there is a copyright notice: '© Neila Rey neilarey.com'.

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://kudoshealthclub.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.

Fit for Life

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)

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.



SOUTH CAROLINA
Developmental Disabilities Council



SOS
Health Care, Inc.



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**
*additional FFL activities will be scheduled in advance

● **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?

HEALTHY EATING PLATE

HEALTHY OILS
Use healthy oils (like olive and canola oil) for cooking, on salad, and at the table. Limit butter. Avoid trans fat.

WATER
Drink water, tea, or coffee (with little or no sugar). Limit milk/dairy (1-2 servings/day) and juice (1 small glass/day). Avoid sugary drinks.

VEGETABLES
The more veggies – and the greater the variety – the better. Potatoes and French fries don't count.

WHOLE GRAINS
Eat a variety of whole grains (like whole-wheat bread, whole-grain pasta, and brown rice). Limit refined grains (like white rice and white bread).

FRUITS
Eat plenty of fruits of all colors.

HEALTHY PROTEIN
Choose fish, poultry, beans, and nuts; limit red meat and cheese; avoid bacon, cold cuts, and other processed meats.

STAY ACTIVE!
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Harvard School of Public Health
The Nutrition Source
www.hsph.harvard.edu/nutritionsource

Harvard Medical School
Harvard Health Publications
www.health.harvard.edu

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 Locco Stache and Dash 5K
 - Myrtle Beach Turkey Trot

Stretching and warming up



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 begun 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

Step away from the candy, and take a closer look at how sugar (of any kind) affects your body.

skin

Byproducts from digested sugar molecules destroy collagen and elastin.

pancreas

Releases insulin stores in effort to reduce blood sugar levels. If over-worked, the organ will stop producing insulin, which causes type 2 diabetes.

gut

Artificial sweeteners cannot be completely digested, which can cause bloating, backage, or a surprising laxative effect.

hips

The sugar your body doesn't burn to use immediately as energy is stored as fat. It could be at your hips; it could be anywhere.



brain

Dopamine is released the second sugar hits your tongue. This is the same pleasure- and satisfaction-focused hormone released when you're in love or take certain drugs.

heart

Insulin spikes cause damage to blood vessels, which contribute to inflammation of the arterial walls. That could lead to increased risk of heart disease.

joints

The same byproducts that destroy the collagen at your skin also destroy collagen in your joints, which, over time, increases inflammation and may even cause arthritis.

SHAPE

Hand Symbol	Equivalent	Foods	Calories
	Fist 1 cup	Rice, pasta Fruit Veggies	200 75 40
	Palm 3 ounces	Meat Fish Poultry	160 160 160
	Handful 1 ounce	Nuts Raisins	170 85
	2 Handfuls 1 ounce	Chips Popcorn Pretzels	150 120 100
	Thumb 1 ounce	Peanut butter Hard cheese	170 100
	Thumb tip 1 teaspoon	Cooking oil Mayonnaise, butter Sugar	40 35 15

What Do We Learn in Fit for Life?

CRAVING THIS...

Try this...

Looking for sweet? Try a dessert flavored granola bar with way better ingredients and nutrients like a Cherry Pie Larabar, a White Chocolate Macadamia Nut Cliff bar, or a Kashii Trail Mix cookie!

Looking for creamy? Grab a protein packed greek yogurt, like Chobani or Oikos! Top with fruit and a low-sugar granola for a superfood fiber and protein combo!

Looking for salty? Try a serving of mixed nuts, air popped popcorn, turkey jerky, dry roasted edamame, or pita with hummus!

Looking for refreshing? Try coconut water! It's FULL of natural electrolytes and comes in a ton of fruit flavors that are no-sugar added! Vita Coco and Zico are available at Wegmans!

Looking for cheesy? Reach for part skim cheese and whole grain crackers! String cheese is great, but if you want something even creamier, try Laughing Cow cheese wedges! Tons of great flavors.

MORE CURES FOR YOUR CRAVINGS!

These superior swaps will satisfy every kind of hunger.

YOU WANT:

Sweet
like sugary candy



TRY:

Frozen Grapes

Before school, rinse and de-stem a bunch of grapes. Place them in a freezer-safe bag and lay them flat in the freezer. They'll be ready to eat by the time you get home!



PAYOFF:

Candy is crammed with sugar that gives you a quick boost followed by a serious slump. Grapes are sweet but won't cause an energy crash!

Crispy & salty
like greasy potato chips



DIY Microwave Popcorn

Mix 1/3 cup popcorn kernels with 1 Teaspoon oil; pour into paper bag. Heat in microwave on high for two minutes, or until popping slows. Sprinkle with a little Parmesan cheese.



Potato chips are nutritional zeros. But popcorn is a natural whole grain, full of fiber that will fill you up fast.

Cold & rich,
like an ice cream sandwich



Fro-Yo Bark

Spread vanilla yogurt on a baking sheet lined with wax paper. Sprinkle with sliced fruit, chocolate chips, or nuts. Freeze until firm, then break into pieces. Store leftovers in a container in the freezer.



Compared with yogurt, ice cream has far less calcium, a mineral you desperately need because your bones are still growing.

You Just Realized...

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

@youjustrealizedd

What Do We Do in Fit for Life?

Fit for Life Initial Fitness Assessment

Name: _____ Date: _____

Age: _____ Weight: _____ Height: _____ BP% _____ BMI: _____

Exercise:	# Able to do in 1 minute
Jumping Jacks	
Air Squat	
Sit-Ups	
Push-Ups	
Step-Ups	

What Do We Do in Fit for Life?

Created By: Mike Uticco (@myzddgus)

FIT DICE

ROLL 2 DICE

IF YOU ROLLED	THEN YOU'LL DO THIS EXERCISE	ROLL THIS MANY DICE FOR # OF REPS
2	JUMPING JACKS	4 DICE
3	PUSH-UPS	3 DICE
4	CURL-UPS	4 DICE
5	SQUAT JUMPS	2 DICE
6	JOG IN PLACE	4 DICE
7	FOREARM PLANK	3 DICE
8	ARM CIRCLES	4 DICE
9	SQUATS	3 DICE
10	PUSH-UPS	2 DICE
11	CURL-UPS	3 DICE
12	JUMPING JACKS	3 DICE

workout for beginners what's your name?

- SPELL OUT YOUR FULL NAME AND COMPLETE THE EXERCISE LISTED FOR EACH LETTER. FOR AN INCREASING CHALLENGE FOLLOW YOUR MIDDLE NAME & DO EACH ONE THREE TIMES FOR VARIETY YOU CAN USE A DIFFERENT HISTORICAL PERSON'S NAME OR A FRODO BAGGINS NAME EACH TIME.
- | | |
|-------------------------------|---------------------------------|
| A 10 jumping jacks | N 10 second jump rope |
| B 5 push-ups | O 10 russian twists |
| C 1 burpee | P 5 plie squats |
| D 20 high knees | Q 10 arm circles |
| E 5 crunches | R 10 skaters |
| F 10 mountain climbers | S 10 second jog in place |
| G 5 squats | T 10 butt kickers |
| H 10 front lunges | U 5 inchworms |
| I 10 side lunges | V 5 tricep dips |
| J 10 second wall sit | W 3 star jumps |
| K 5 calf raises | X 5 bird dogs |
| L 5 second plank | Y 10 leg raises |
| M 3 squat jumps | Z 5 squat jacks |
- CONSULT A DOCTOR BEFORE STARTING AN EXERCISE PROGRAM. WWW.THEWELL.COM

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
Stand tall with your legs hip width apart, feet facing forward, arms alongside your body. Inhale deeply, look up and reach your arms to the sky. Say, "Hello, sun in the sky!"

Pretend to be a jellyfish
Exhale, bend your upper body, reach for your toes and pretend your arms are jellyfish tentacles. Say, "Hello, jellyfish in the sea!"

Pretend to be a sand castle
Place your palms flat on the ground, inhale and step your right foot back. Keep your back flat and your chest open, pretending to be a sand castle. Say, "Hello, sand castle on the beach!"

Pretend to be a dolphin
Exhale and step your left foot back to create an upside-down V. Straighten your legs, relax your neck and look down between your legs. Imagine being a dolphin gliding through the waves. Take 5 deep breaths. Say, "Hello, dolphin in the waves!"

Pretend to be a crab
As you inhale, shift forward, drop your knees, and come to an all-fours position. Imagine you are a crab scuttling across the sand. Say, "Hello, crab on the sand!"

Pretend to be an urchin
As you exhale, sit on your heels, keeping palms flat in front of you, rest your head on the mat. Bring your arms back alongside your body and imagine being an urchin floating. Say, "Hello, urchin resting on a rock!"

Reverse 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.



Health Care, Inc.



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

Howcast.com



Cupid Shuffle Song

