

# Mapping AquOTic's active ingredients: A Rehabilitation Treatment Specification System approach for drowning prevention in autism

Jewel Crasta, PhD, OTR/L, Lisa Juckett, PhD, OTR/L,  
**Erika Kemp**, OTD, OTR/L, BCP, FAOTA



Unintentional drowning is a leading cause of death in autistic children.

AquOTic → An occupational therapy-based water competency intervention (Kemp et al., 2024)



**Rehabilitation Treatment Specification System (RTSS)**  
A novel framework to describe interventions

Active ingredients

What the OT does

Mechanism of action

How AquOTic works

Treatment targets

Change in function

## AquOTic's Theory-driven conceptual framework

Motor learning theory

Behavioral theory

Sensory Integration theory

Person Environment Occupation Model

Halliwick Approach



THE OHIO STATE UNIVERSITY

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Erika.kemp@osumc.edu

# Mapping AquOTic's active ingredients: RTSS approach

## Active ingredients

- Play-based activities to elicit motor skills
- Grading activities at stations
- Shaping of motor skills
- Repetition of motor skills
- Natural or scheduled reinforcements
- Sensory accommodations or adaptive devices
- Child-led
- Visual modeling
- Visual schedule or icons
- Child is engaged and attending
- Child-therapist interaction shows therapeutic relationship
- Group setting with individualized activities
- Caregiver education

Mechanism of action:

Learning by doing

## Goals and Target:

- Improved water competency (swim skills and water safety)
- Caregiver competence and knowledge on drowning prevention

