

CANADA ARTISTIC SWIMMING

A PARENT'S GUIDE TO ARTISTIC SWIMMING

ALBERTA
ARTISTIC
SWIMMING

SYNCHRO BC

SYNCHRO
MB



Synchro
NOVA SCOTIA

ONTARIO
ARTISTIC
SWIMMING



Synchro PEI
Charlottetown Natads

NATATION
ARTISTIQUE
QUEBEC

Synchro
ASK



Welcome to Canada Artistic Swimming

All parents want to ensure their child has every opportunity to succeed in life. Artistic Swimming is the perfect activity to set a young girl or boy on the path to becoming a champion for life. Our sport nurtures self-esteem, provides an abundance of successful role models, and offers the perfect mix of technical, artistic, social, and psychological skill development.

Welcome to the family of artistic swimming

Canada Artistic Swimming, a volunteer-based organization with a professional staff in Ottawa, is responsible for the development and operation of the sport through a wide variety of programs. The sport of artistic swimming is accessible to all Canadians, promotes fun, fitness and allows participants to reach their own level of excellence.

Canada Artistic Swimming - The Organization

- ☑ Is the national sport organization (NSO) and governing body for artistic swimming in Canada, and serves as the unified voice of the 10 provincial and 1 territorial artistic swimming associations, and 150 clubs working together to further the development of the sport across Canada.
- ☑ Is recognized by the Government of Canada as the sole governing body for amateur artistic swimming in Canada.
- ☑ Is recognized by the Fédération Internationale de Natation (FINA), Union Americana de Natacion (UANA) and Aquatics Canada as the central agency to develop artistic swimming in Canada and to represent Canada in international artistic swimming competitions.
- ☑ Is a national, non-profit, volunteer association actively engaged in enhancing the quality of life for all Canadians through the promotion, teaching and fostering of the sport of artistic swimming.
- ☑ Is an independent research, educational and service organization dedicated to the encouragement and improvement of artistic swimming in Canada.
- ☑ Recognizes the provinces/territory as its member organizations and the clubs as its primary agents of program delivery to some 7500 athlete registrants in pools across the country and supporting a thousand professional coaches, enabled by over 400 volunteer officials and hundreds of club volunteers.
- ☑ Provides technical and administrative services to its athletes, coaches, officials and volunteers.
- ☑ Coordinates and provides technical and administrative services to the eleven provincial/territorial sport organizations (P/TSO).
- ☑ Works towards improving the quality of artistic swimming programs and aquatic facilities in Canada.
- ☑ Operates through a national volunteer board of directors and a number of action committees comprised of interested members from across Canada.
- ☑ A professional staff administers association business from the National office based in Ottawa.
- ☑ Since 1967, Canada Artistic Swimming (previously Synchro Canada) has fostered the pursuit of excellence while developing athletes, citizens, and ambassadors of the sport of artistic swimming (previously synchronized swimming) at all levels. From the sport's 1924 beginnings in Montréal, artistic swimming has been actively pursued by more than 70 countries worldwide. Canada proudly ranks among the best of these nations.

Who we are

Forging unity through diversity



Canada is a welcoming nation. An inclusive nation. In a world where many are turning inward and closing off, Canada is reaching out. We want to build bridges while others build walls. As individuals, we represent the diversity of many nations. As a country, we have embraced the differences between one another.

We are more than the sum of our parts. Together, we are better.

Creative

What happens beneath the surface is above expectations.

Dynamic

Breathtaking power. All without oxygen.

Inclusive

The merit of an athlete is what they are made of on the inside, not the outside.

Collaborative

Teamwork makes the dream work.

Powerful

It takes a certain kind of strength to support your team-mates. It takes a different kind to literally support them.



Our Vision: To be a world leading nation in artistic swimming

To move and inspire Canadians through the performances of our artistic swimmers and always strive to be World and Olympic Champions.

Our Mission

To achieve excellence in all aspects of artistic swimming in Canada.

Our Values

Athlete Focus–Coach Led

The athlete/coach duo is at the center of our actions and decisions.

Excellence

We are motivated by excellence and innovation in everything we do.

Team Work (Collaboration)

We believe in the power of our team, people and organizations.

Ethics/Respect

We welcome diversity and respect all perspectives and expect responsible, ethical, and accountable behaviour from all stakeholders.

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Synchro B.C.

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Manitoba Artistic Swimming

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Synchro New Brunswick

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Website: www.synchro.nb.ca

Synchro Newfoundland & Labrador

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Ontario Artistic Swimming

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Table of Contents

Welcome to Canada Artistic Swimming. i

Who we are ii

To Contact Canada Artistic Swimming iii

A History of Artistic Swimming in Canada 2

About Artistic Swimming 3

Let's Talk About LTAD 4

Canada Artistic Swimming's LTAD Framework 5

What Parents can do at LTAD Stages 7

Intro to Artistic Swimming Competitions 9

Artistic Swimming's Competitive Structure 11

Judging Artistic Swimming 12

Essential Equipment for Training & Competition 14

A Winning Team, You and your Child 15

Supporting your child with positive conduct 16

Nutrition Tips for your Artistic Swimmer 17

Common Injuries in Artistic Swimming 19

Glossary of Terms 21

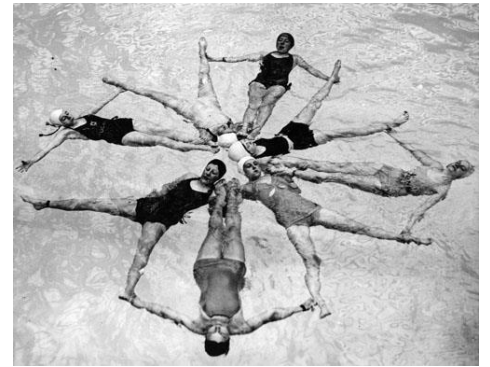
References, Resources & Acknowledgements. 23



A History of Artistic Swimming in Canada

Born in Canada

Although an aquatic activity called “water ballet” was demonstrated at several world exhibitions and fairs in the late 19th and early 20th centuries, our sport began to take form in Canada in the 1920’s under the name of “Ornamental Swimming.” This graceful and beautiful aquatic activity soon spread to the United States, where a display at the 1934 Chicago World Fair attracted international publicity. The popularity of this new brand of swimming continued to grow when swimming star Esther Williams performed in a string of MGM “aqua musicals” in the 1940’s and 1950’s.



More than just grace and nose clips

Over the next few decades, this aquatic phenomenon began to evolve into a highly technical and physically demanding competitive sport called Synchronized Swimming. Canada established itself as a leader in the sport and began to share its expertise with other nations, which helped its development across the globe. In 1954, FINA, the international federation for aquatic sports, recognized Synchronized Swimming as an official aquatic sport and in 2018 FINA renamed the sport to Artistic Swimming. The sport made its debut at the inaugural World Aquatic Championships in Belgrade in 1973 and was welcomed to the Olympic Games program in 1984 (solo and duet). Artistic Swimming consists of the following disciplines: Solo, Duet, Mixed Duet (a duo comprised of one male and one female), Team (8 swimmers), Free Combination (10 swimmers) which is a routine comprised of team, duet/trio, and solo components and the Highlight Routine (10 swimmers) which showcases the sport’s spectacular acrobatic and creative movements. At the Junior and Senior levels Solo, Duet, Mixed Duet and Team have a Technical and Free routine. The team event replaced the solo and duet events of 1984 and 1988 at the 1996 Olympic Games, and at the 2000 Olympic Games, the duet event returned to the program. The competitive rules and manner of judging are similar to such sports as figure skating and gymnastics.



Canada’s most successful summer sport

For many years, artistic swimming was Canada’s most successful amateur sport. With the exception of 1998, our athletes won medals at every World Championships between 1973 and 2001 and at every Olympic Games between 1984 and 2000.

Canadian Olympic Medal Chart	
Gold	1988 (2), 1992 (1)
Silver	1984 (2), 1992 (1), 1996 (1)
Bronze	2000 (1)

More fish in the pool

Since 2000, the competition has stiffened and the number of countries competing in artistic swimming at a high level has increased significantly with Russia, China, Japan and Spain dominating the podium. Canada, while still considered amongst the top nations, recognizes that in order to reclaim its’ position as an artistic swimming superpower, it must consider adjusting its programming, training, coaching, and administration philosophies.

About Artistic Swimming

Artistic swimming is a hybrid form of swimming, gymnastics, and dance consisting of swimmers performing a synchronized routine of complex and dynamic under water movements (known as figures) and arm movements in the water accompanied by music. Duet and Team events also include many creative and acrobatic movements that require strength and skill.

Artistic swimming is open to both male and female athletes. In 2014, FINA (the sport's world-wide governing body) approved the addition of Mixed Duet events (Technical and Free) to the FINA World Championships programme where a female and male swim as a pair (similar to Ice Dancing or the Pairs event in figure skating). In Olympic competition, currently only females are eligible to compete in the Team and Duet events, however competition at the Provincial, National and World Championship level is open to both male and female athletes.

Most athletes begin their journey in artistic swimming at the community or club level where they join a recreational program 1-2 times a week for a 10-12 week session or for an entire year program. After enjoying an entry level experience in the sport, athletes can then choose to join a competitive program with their local club where they can enjoy training and competing at the local, regional and provincial level. Athletes can then choose to progress through the competitive program and can enjoy the challenge of competing and representing their club and province at the national level. From there talented athletes will be selected to national teams, and one day may reach the world and Olympic level!

Building the artistic swimmer

Artistic swimmers must be completely at home in the water and demonstrate outstanding fitness both in and out of the water. Artistic swimmers are known to be some of the fittest athletes in the world! Imagine running a race but holding your breath while doing it. In order to develop into a world-class artistic swimmer, athletes must not only practice their artistic swimming or technical skills, but train in swimming, flexibility, strength and other general athletic skills both in and out of the water.

General Athletic Training:

Swimming	Flexibility	Speed
Agility	Balance	Strength
Ballet/Dance	Coordination	

Athletes 15 and under will also train many hours on their figure skills (performed individually involving demonstrating transitions through various positions in the water) and routines, which are the most popular and recognized elements of artistic swimming involving dynamic swimming that is synchronized to music and each other (in duet and team).

Artistic Swimming Skills

Body positions	Sculling	Propulsion skills
Routine skills	Routine patterns	Transition movements



Did you know that it is also very important for artistic swimming athletes to train on land?

One of artistic swimming's challenges is explaining to parents that training is not 100% in the water. Land training is an essential component of artistic swimming training. Athletes will train fundamental movement skills, flexibility, ballet/dance, and strength training on land. Land-drill is also an important land-based activity where the athletes will walk through their routines to the music to practice timing, arm positions and synchronization. Coaches will also take time to have team meetings with the athletes for goal setting, competition planning, as well as to do video review of figure skills and routines.

Let's talk about LTAD

What is LTAD?

Long-Term Athlete Development (LTAD) is a seven-stage training, competition and recovery pathway guiding an individual's experience in sport and physical activity from infancy through to adulthood. LTAD is a model for development in physical activity and sport that not only provides a safe, enjoyable, and progressive pathway for children to pursue healthy physical activity, but also provides a pathway to excellence.

Children, youth and adults need to do the right things at the right time to develop in their sport or activity – whether they want to be hockey players, gymnasts, figure skaters or artistic swimmers. Long-Term Athlete Development (LTAD) describes the things athletes need to be doing at specific ages and stages.

Science, research, and decades of experience all point to the same thing: kids and adults will get active, stay active, and even reach the greatest heights of sport achievement if they do the right things at the right times. This is the logic behind the Long-Term Athlete Development Framework (LTAD).

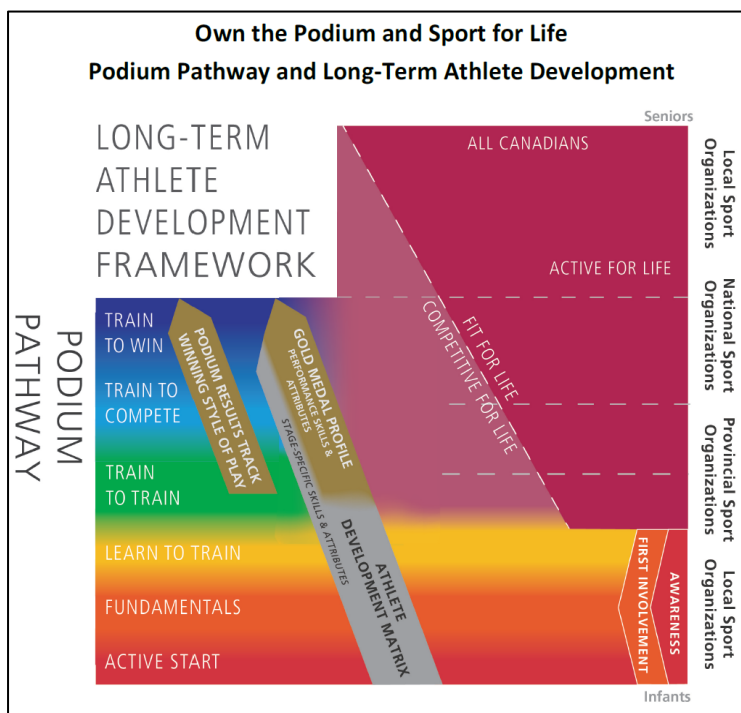
Awareness and **First Involvement** stages engage individual in sport and physical activity, they must be aware of what opportunities exist, and when they try an activity for the first time, it is critical that the experience is positive.

Active Start, **Fundamentals** and **Learn to Train** stages develop physical literacy before puberty so children have the basic skills to be active for life. Physical literacy also provides the foundation for those who choose to pursue elite training in one sport or activity after age 12.

Train to Train, **Train to Compete** and **Train to Win** stages provide elite training for those who want to specialize in one sport and compete at the highest level, maximizing the physical, mental, and emotional development of each athlete.

Active for Life stage is about staying Active for Life through lifelong participation in competitive or recreational sport or physical activity.

Each sport in Canada has developed their own sport specific LTAD Framework, and the Canadian Sport for Life Society (a government funded Multi-Sport Organization) supports and facilitates the implementation of Long-Term Athlete Development within all levels of sport organizations, Games franchise holders, multisport organizations, the federal and provincial/territorial governments, and schools.



Canada's Sport for Life organization provides leadership, guidance and resources for all stakeholders including parents. Please visit www.sportforlife.ca for great information about LTAD and where you can access unique resources for parents.

Canada Artistic Swimming's LTAD Framework



Canada Artistic Swimming's LTAD Framework is structured for entry-level participants interested in trying artistic swimming and learning the basics of the sport, as well as for athletes looking for a competitive program that facilitates achieving the highest levels of artistic swimming.

The program is structured for participants to enter the competitive programs between the ages of 8 to 14 years of age, whether they are progressing from the AquaGO! program or joining artistic swimming after participating in another sport.

The main objective of the first two stages (Stage 1 - **Active Start** and Stage 2 - **FUNdamentals**) is to have fun in the water while encouraging physical literacy and learning fundamental movement skills.

Moving into Stage 3 - **Learn to Train** athletes will be building their artistic swimming technical foundation and physical literacy skills whether in the AquaGO! program or a "New Competitors" program.

Stage 4 - **Train to Train** offers the opportunity for these "Developing Competitors" to be identified within the sport's "Podium Pathway". Athletes will develop the competitive foundation, be challenged, and build pride in themselves and the sport.

In Stage 5 - **Train to Compete** athletes have developed into "Advanced Competitors" and are mastering the competitive foundations. Further, athletes are preparing to transition to the Learn to Win and Perform to Win programs.

The Stage 6 - **Learn to Win** program for "Advanced Competitors" supports athletes competing at the Senior level (Club, Provincial Team, University or Full-Time Training Group), and the Stage 7 - **Perform to Win** program is designed for "Performance Competitors" at the Full-Time Training Group competing at the very highest level of the sport and pursuing international excellence.

Lastly, the Stage 8 - **Sync for Life** program is for participants who wish to continue to participate in artistic swimming as a professional athlete, masters athletes, recreational participant, as a coach or an official. This stage focuses on supporting and facilitating lifelong participation in the sport.

Canada Artistic Swimming's LTAD Framework



LTAD FRAMEWORK 2.1

Nurturing excellence from pool to podium



Canada Artistic Swimming's LTAD Framework 2.1 "Nurturing Excellence from Pool to Podium"

is the complete resource document for all stakeholders to read and understand athlete development as it applies to the artistic swimmer. It is recommended that all parents take the time to read this highly informative resource which will provide you with everything you need to know about your child's development in artistic swimming.

You can find the

Canada Artistic Swimming LTAD Framework 2.1

posted online and available to download here:

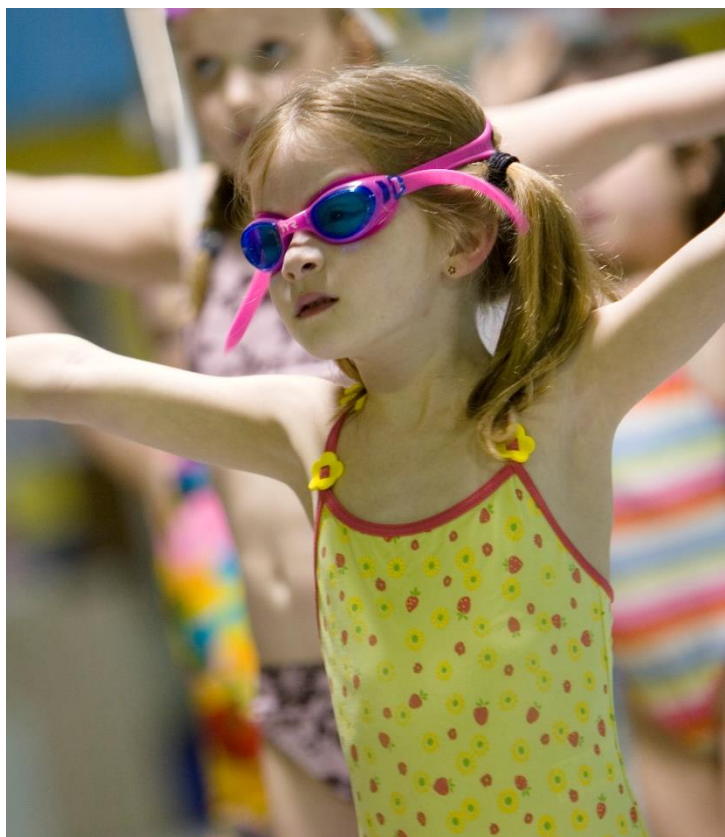
<https://artisticswimming.ca/i-love-synchro/ltad-framework-2-0/>

The Artistic Swimming LTAD Framework is designed to:

- Promote lifelong enjoyment of athletic activity.
- Provide a structured athlete development pathway.
- Describe the Podium Pathway for elite athlete development.
- Create podium success.
- Provide equality in access and opportunities to athletes throughout Canada.

LTAD encourages athletes to enjoy artistic swimming and improve their performances through:

- Logical and integrated training and practice programs.
- Application of growth, development, and maturation principles.
- Optimal structure for competition at all stages of LTAD.



What parents can do at LTAD Stages

As a parent, you have the ability to encourage your child in sport and physical activity at each stage of LTAD. Here are some of the things you can do:

Active Start (females and males 0-6)

- ☑ Provide organized physical activity for at least 30 minutes a day for toddlers and at least 60 minutes a day for preschoolers, such as AquaGO! levels 1 and 2.
- ☑ Provide physical activity everyday for your child regardless of the weather.
- ☑ Promote the key values of fun and inclusion.

FUNdamentals (females 6-8, males 6-9)

- ☑ Consider enrolling your child in a variety of seasonal sports activities aside from the artistic swimming program they are currently registered in such as AquaGO! levels 3-6.
- ☑ Be sensitive to your child's preferences for activities. For example, don't insist they play basketball if they show an interest in gymnastics or dance.
- ☑ Your child should be active in several physical activities or sports each year.
- ☑ Continue to encourage your child in unstructured play outside of formal activities and to turn off the TV, tablet/computer, and video games!
- ☑ Promote the key values of fun, inclusion, and fairness

Learn to Train (females 8-11, males 9-12)

- ☑ Identify sports and activities where your child has fun and experiences success, and narrow the focus to 3 sports or activities through the year.
- ☑ If your child has taken a special interest in artistic swimming, monitor the activity and training program to make sure your child is not over-training, over-competing, or specializing too early. Talk to the coach if you have concerns.
- ☑ Accompany your child to her first competitions and support and encourage them.
- ☑ Be sure to respect the coach's side and help your child set goals.
- ☑ Be present and take time to appreciate your child's progress without ever placing emphasis on the results.
- ☑ Help the child develop his/her critical sense (e.g., what would you like to improve for your next competition? What did you learn from this competition?).
- ☑ Continue to encourage your child in unstructured play outside of formal activities.
- ☑ Provide balanced healthy food choices and be a good role model for healthy and active living.
- ☑ Promote the key values of fun, inclusion, and fairness

Train to Train (females 11-15, males 12-16)

- ☑ In artistic swimming, it is acceptable for coaches to begin identifying and encouraging "talent" at the Train to Train stage, but caution should still be shown against premature specialization. Children mature at different rates, so your child may still have undiscovered capacities in other sports.
- ☑ Parents should be cautious that their children are not pushed to over-train or over-compete as injury and burnout can result. This is the stage when many promising young athletes quit their sport or activity due to burnout or excessive pressure from coaches and parents.
- ☑ Trust the coach and encourage and facilitate open communication with coaches.
- ☑ Team sport coaches should individualize training based on maturation.
- ☑ Discuss goals, expectations, results and competition related stress with your child.
- ☑ Focus on your child's progress, do not compare them to other athletes, and encourage your child to swim for themselves and the love of sport.
- ☑ Be present without being over-involved (beware of not placing pressure on the results)
- ☑ Be a good role model for healthy and active living and provide balanced healthy food choices
- ☑ Promote the key values of fun, fairness, and respect.

What parents can do at LTAD Stages

Train to Compete (females 15-18, males 16-19)

- ☑ At this stage, your child needs the most skilled and qualified coaches to ensure their physical, mental, and emotional needs are correctly addressed within their activity.
- ☑ The role of the parent is to seek the best training situation for their child, and to support the training guidelines as prescribed by coaches who are aligned to LTAD principles.
- ☑ Your child's certified coach should be supported by an Integrated Support Team (IST) or Performance Enhancement Team.
- ☑ Promote the key values of fun, fairness, excellence, and respect.

Learn to Win (females 18+, males 19+)

- ☑ Support your child as they train to achieve the highest level of their sport.
- ☑ Support your child (financially, emotionally and mentally) in training and performing for a living.
- ☑ Recognize that other parents will now "look up" to you; therefore, help them by directing them to become aware and informed.
- ☑ Promote key values: fun, fairness, excellence, and respect.

Perform to Win (females 18+, males 19+)

- ☑ Celebrate that your child has become an international champion.
- ☑ Support your child (emotionally and mentally) in training and performing for a living.
- ☑ Encourage your child as they train to achieve skill perfection and refined performances.
- ☑ Encourage your child to be the best they can be; that's real excellence.
- ☑ Encourage your child to give back to other children and act as a positive role model.
- ☑ Promote the key values of fun, fairness, excellence, and respect.

Sync for Life (enter at any age)

- ☑ You might encourage your child to enter this stage at any age, especially if you sense an aversion to competition.
- ☑ Encourage your child to explore other roles in artistic swimming such as coaching or officiating.
- ☑ Encourage your child to continue participating in artistic swimming in University and/or a Masters team.
- ☑ To help your child make the transition to non-competitive involvement in physical activity, you should provide a positive example by practicing your own activity.
- ☑ You should also explore and expose your child to new activities.
- ☑ An active parent is the best role model!
- ☑ Promote the key values of fun, fairness, staying healthy, and giving back.



A Sport Parent's Guide from Sport for Life (pictured left) and **Long-Term Athlete Development Information for Parents** by the Coaching Association of Canada (pictured right) are two must-read documents for parents with children in sport. Please click on the cover images to link to these great resources.



Intro to Artistic Swimming Competitions

Whether having spent a year or two experiencing artistic swimming as a recreational or novice participant or transitioning to artistic swimming from another sport, your child may now be ready to try competitive artistic swimming! This section will give you an introduction to artistic swimming's competition system.

Competitions and Events

The competitive age groups for artistic swimming are:

- ☑ **10 and under**, compete within their own province only
- ☑ **11-12**, compete provincially and may opt to nationally (via invitational competition or provincial team program)
- ☑ **13-15**, can choose to compete provincially or nationally
- ☑ **Junior**, athletes aged 15-18 can choose to compete nationally in Junior FINA or provincially in Junior FINA or 16-20
- ☑ **Senior**, athletes aged 18+
- ☑ **Masters**, athletes aged 19+
- ☑ **Athletes with a Disability** (Level 1-5 Physical and Cognitive categories)

The events or disciplines in artistic swimming are:

- ☑ **Figures** (13-15, 11-12, 10U, Athletes with a Disability Level 1-5 Physical and Cognitive categories)
- ☑ **Solo Technical routine** (Junior and Senior categories only)
- ☑ **Solo Free routine** (Senior, Junior, 13-15, 11-12, Masters, Athletes with a Disability)
- ☑ **Duet Technical routine** (Senior, Junior and Mixed Duet categories only)
- ☑ **Duet Free routine** (Senior, Junior, Mixed Duet, 13-15, 11-12, 10U, Masters, Athletes with a Disability)
- ☑ **Team Technical routine** (Junior and Senior categories only)
- ☑ **Team Free routine** (Senior, Junior, 13-15, 11-12, 10U, Masters, Athletes with a Disability)
- ☑ **Free Combination** (13-15, Junior, Senior)
- ☑ **Highlight Routine** (Senior)

More about the Events . . .

Figures

- Figures are swum individually with no music in front of a panel of judges (usually comprised of 5 judges).
- A figure is a combination of positions and transitions (a movement from one position to another) that demonstrates an athlete's technical abilities (control, extension, flexibility, height, stability, etc.)
- There is an internationally recognized list of figures and figure groups published by FINA, who also assigns figures a degree of difficulty (which is used as part of the figure score calculation). There is a progression of difficulty from 10 and under up to the 13-15 age group level.
- A traditional figure event is comprised of 4 figures that are competed at four panels around the pool.
- The total combined score of all four figures will account for 50% of the final (or "championship") score in solo, duet and team events in 13-15 through 10 and under age groups (the other 50% is the routine score).

Intro to Artistic Swimming Competitions

Solo

- Solo is an individual event where the swimmer will synchronize their routine to the music.
- At the Junior and Senior levels athletes compete in a technical routine and a free routine.

Duet/Mixed Duet

- Duet events have two swimmers synchronized with each other and the music.
- Mixed duet includes one male and one female swimmer
- At the Junior and Senior levels duet and mixed duet athletes compete in a technical routine and a free routine.

Team

- Team events have 8 swimmers (or up to 10 provincially) synchronized with each other and the music
- Teams typically include 8 swimmers, but the minimum number is 4.
- In the Junior and Senior categories, team events include a technical routine and free routine.

Technical vs Free Routines

- In the Junior and Senior level technical events, the swimmers perform pre-determined elements executed in a specific order within an original choreographed routine and to music of choice.
- The free routine has no required elements and swimmers are 'free' to demonstrate their creativity and technical abilities as an originally choreographed routine.

Free Routine Combination

- The free combination event (commonly referred to as the "combo" event) includes up to ten swimmers.
- The swimmers perform in one continuous routine but during the routine there will be segments where different numbers of swimmers will perform, exchanging in and out of either solo, duet, trio or team parts.

Highlight Routine

- The Highlight Routine is the newest event for artistic swimming, and is competed at the Senior level only.
- A team of 10 is required to perform a minimum of 4 acrobatic movements (a general term for jumps, throws, lifts, stacks, platforms, etc., which are performed as spectacular gymnastic feats and/or risky actions), a connected or intertwined action and a float to give a kaleidoscope effect.

Competition Swim Suits and Make-Up

Artistic swimmers will often compete with elaborately sequined or decorated swimsuits. At Canada Artistic Swimming, we are moving away from the importance of such "costumes" and are emphasizing the athletic components of the sport. As such, our national strategy is to compete with simple, athletic-type swimsuits and focus on the "faster, higher, stronger" aspect of artistic swimming. Artistic swimmers also wear make-up (similar to figure skating and gymnastics). The make-up must be simple in its application with the goal to enhance and highlight the features of the athletes. Make-up must not be theatrical or distracting.

Music


Music is integral to artistic swimming. The choice of music is not judged but will support or inspire the theme of the routine. The choreography and performance will be expected to synchronize movements and speed with the tempo and accents of the music. In artistic swimming competitions and most practices, there will be speakers underneath the water so swimmers can continue to hear the music during their underwater segments.

Artistic Swimming's Competitive Structure

Artistic swimming in Canada offers a competition structure in which athletes can progress through a system that offers competitive opportunities at the regional, provincial, national, and international levels.

Beginning at the Learn to Train stage athletes may enter skills events, competitions, and festivals. Athletes may then progress to provincial competitive events, national level competition if desired, and onward to international competitions if selected to a national team or approved to by Canada Artistic Swimming.

For those athletes participating in Sync for Life, they may select competitive events at the Regional, Provincial, National and International level, allowing them to continue to enjoy competing in the sport at a level of their choosing. Athletes with a disability, may also select events available at the Regional, Provincial, National and International level, allowing them to enjoy a competitive experience that best fits their goals.



	Competition Style	Age Categories	Competitions
Sync for Life	Masters	19+	Regional Events Provincial Events National Championships International Invitationals Masters Worlds
International	FINA Style (International Rules)	12&Under, 13-15, 16-18, Junior (15-18), Senior (15+)	Olympic Games (Sr) World Championships (Sr) FINA World Series (Sr) Junior Worlds (Jr) FINA Youth Worlds (13-15) Mediterranean Cup (13-15) UANA Championships (11-12,13-15/Jr/Sr)
National	FINA Style (International Rules)	11-12, 13-15, Junior (15-18), Senior (15+), Masters (19+)	Canadian Championships (13-15/Jr/Sr) National Qualifier (13-15, Jr, Sr) SYNC Invitational (11-12, 13-15, Jr, Sr)
Provincial	Skills Events and Competitions	Please verify with your provincial sport organization	Provincial Championships Provincial Qualifying Competitions Provincial Invitationals
Regional	Skills Events & Festivals	Please verify with your provincial sport organization	Regional Skills Events Regional Festivals

Judging Artistic Swimming

Like many other amateur sports, artistic swimming officials are volunteers who donate their time for competitions, testing, clinics, and feedback. Judges must take courses and evaluations to become accredited officials and maintain their certification. Judging levels range from Judge level 1 (novice/regional) to FINA A (World Championships and Olympics). Judges are trained and evaluated to assess both figures and routines, and some judges participate in additional training to become referees (lead the deck operations of competitions, ensuring rules are being adhered to, results are approved, etc.). Further there are also scorers, who are trained to run the computer scoring program and calculate results for artistic swimming events.

Judging Scale

Figure and routine performances are evaluated based on a 10-point scale, from 0 (completely failed) to 10 (perfect) and is the international standard set for judging artistic swimming by FINA, the international governing body. Judges score figures and routines from 0-10 in increments of 0.1.

As athletes progress in the sport from the entry level, to provincial, to national, and then international, you will see the gradual improvement of skill and therefore scores. Typically, athletes at the World Championship and Olympic level score in the Very Good to Perfect range, at the National level athletes will typically score in the Competent to Very Good range, and at the Provincial/Regional level athletes will typically score in the Satisfactory to Good level.

Artistic Swimming Judging Scale

Perfect	10
Near Perfect	9.9 – 9.5
Excellent	9.4 – 9.0
Very Good	8.9 – 8.0
Good	7.9 – 7.0
Competent	6.9 – 6.0
Satisfactory	5.9 – 5.0
Deficient	4.9 – 4.0
Weak	3.9 – 3.0
Very Weak	2.9 – 2.0
Hardly Recognisable	1.9 – 1.1
Completely Failed	0

Judging Figures

An athlete's figure performance is judged based on accuracy of positions, accuracy of transitions and movements, height (of body parts out of the water), stability, extension, clarity, timing, uniform motion, ability to stay stationary (unless movement is required), ease of performance, and general impression.

At a figure competition, athletes will swim out in front of the judging panel (usually comprised of 5 judges) and perform their figure as the judges watch carefully and assesses their performance. Once the athlete has finished and swims away, each of the judges will "flash" their given mark out of 10 using numbered scoring cards or "flash cards". Scorers (usually parent volunteers) write down the marks on a chart at a poolside table near the panel, and the scores are then taken to the scoring official or "Chief Scorer" who inputs the marks into the scoring program which then calculates the final figure results for the competition.

Before each competition, a figure group will be "drawn" randomly and communicated publicly so coaches know which four figures the athletes will be competing and need to prepare for. Figure Groups are comprised of 2 Compulsory Figures (which are competed at every competition) and 2 Optional Figures (those from the group "drawn").

Judging Artistic Swimming

Judging Routines

Routines are also evaluated on the FINA 10-point scale, however, routines are judged by three separate panels of 5 judges each evaluating designated components – **Execution**, **Artistic Impression**, and **Difficulty**. Each Judge on each panel will give a score out of 10 for the component they are evaluating.

Execution (30%)	Artistic Impression (40%)	Difficulty (30%)
A judge's mark for Execution will consider both the routine's demonstrated quality of Execution and Synchronization for their mark out of 10.	A judges' mark for Artistic Impression will consider the routine's Choreography, Music Interpretation and Manner of Presentation for their mark out of 10.	A judge's mark for Difficulty will consider only the routine's Difficulty (the quality of being hard to achieve) for their mark out of 10.

In routine competition, judges do not flash their marks with score cards, but write their mark out of 10 on a piece of paper called a "chit". The chits are collected and brought to the scoring table for input into the scoring system. At national and international competitions judges use a computerized scoring system to input their scores.

Routines receive a score for Execution out of 30, a score for Artistic Impression out of 40 and a score for Difficulty out of 30, resulting in a total routine score out of 100. A championship score out of 100 is also calculated (50% figure score + 50% routine score). These scores are then read aloud by the announcer. After the event is completed official results are posted at the facility, emailed to coaches, and posted on the event/organization website.

Junior and Senior Technical Routines are judged and scored slightly differently with panels for Execution (30%), Impression (30%) and Elements (40%).

Execution

The level of excellence in performing highly specialised skills. Execution of all movements.

Synchronization

The precision of movement in unison, one with the other, and the accompaniment above, at and below the surface. Synchronisation of timing of one with another and with music.

Choreography

The creative skill of composing a routine that combines artistic and technical elements. The design and weaving together of variety and creativity of all movements.

Music Interpretation

Expressing the mood of the music, use of the music's structure.

Manner of Presentation

The manner in which the swimmer(s) present(s) the routine to the viewers. The total command of the performance of the routine.

Difficulty - the quality of being hard to achieve. Difficulty of all movements and of synchronization.

Essential Equipment for Training & Competition

Training:

- ☑ **Swimsuits:** Training swim suits should be one-piece, non-transparent and suitable for swimming laps. Athletes will require a training suit for their practices/daily training.
- ☑ **Swim Caps:** A swim cap will keep hair out of the swimmers face and mouth during practice.
- ☑ **Goggles:** Recommended for beginners and required for competitive swimmers during training.
- ☑ **Nose clips:** A small clip of hard plastic or wire with a thin rubber coating, used to stop water from entering the nose during underwater movements.
- ☑ **Collapsible bottles:** Used by many coaches to teach and practice skills, collapsible water containers with handles are inflated to be used for holding positions in the water without having to move the arms or hands.
- ☑ **Yoga mat:** Many artistic swimmers bring yoga mats to practice for on-land flexibility, extension or strength training.
- ☑ **Resistance bands:** Used by many coaches to lead athletes in flexibility, extension and strength exercises
- ☑ **Hydration & Nutrition:** Refillable water bottle and healthy nut-free snacks.
- ☑ **Attire & Footwear:** towels, running shoes, flip flops, refillable water bottle, sport attire for stretching.

Competition:

- ☑ **Club Training Suit & Swim Cap:** For spacing, practice, and warm-ups
- ☑ **Figures suit:** Athletes require a plain black training swimsuit for figure competitions.
- ☑ **White Swim Cap:** For figure competitions, athletes must wear a plain white unmarked cap.
- ☑ **Goggles:** Worn during warm-ups and for the figure competition. Goggles are not permitted to be worn for routine competitions.
- ☑ **Routine suit(s):** Athletes will require a routine suit for each routine event they compete in (solo, duet, team, combo, highlight). These suits are usually coordinated by the coach with the parents.
- ☑ **Nose clip:** Use of the nose clip is permitted in all artistic swimming events.
- ☑ **Hair gelling supplies:** Unflavored gelatin is used to keep the hair slicked back in a tight bun and waterproof for routine events.
- ☑ **Headpieces:** For routine events, the athlete hair is gelled into a tight bun. Buns are often covered with a sewn "bun cover" in the same color and material as the event routine suit. Additionally, some teams choose to add a head piece as an accent which is pinned to the hair with bobby pins.
- ☑ **Attire & Footwear:** Club uniform, athletic shoes, and flip flops.
- ☑ **Hydration & Nutrition:** Refillable water bottle and healthy nut-free snacks

A winning team, you and your child

Children who have fun playing a sport or taking part in physical activity are more likely to stay active and healthy for their entire lifetime. They are also more likely to develop a higher level of physical literacy and also have a better chance to pursue excellence in sport. Parents play a key role in supporting their children and facilitating a healthy relationship with sport throughout and the ups and downs of participation, training and competition.

To be a winning team with your child incorporate these key success factors in your role as a sport parent:

Be a supportive parent, not a coach!

Your role as a parent is to give support not technical advice. Leave the coaching and feedback to the coaches, and be the best parent you can be in a supporting role! Provide encouragement and empathy, and ensure your child feels they can communicate with you. Giving your child corrections or criticisms on their performance will frustrate and annoy them as they usually will have received appropriate performance feedback from their coach.

Don't define success and failure by winning and losing

One of the goals of participating in sport for children is skill acquisition, both technical and life skills. Help your child focus on gaining skills and achieving their personal goals as well as understanding the separation between success and failure and winning and losing. A child may perform their personal best but not see success in the results, or perform below their potential and win a medal. It is important that parent's support the experience and provide guidance. It is also important to teach your child how to fail and to use any experienced failures as motivation to improve. Teach your child how to view setbacks and mistakes positively and as a valuable learning experience.

Help make the sport fun for your child

It's common knowledge that when an athlete is having fun training and competing, then they will learn and perform better. When a child stops having fun, or starts dreading practice or competition, then as a parent you should be concerned. When training or competing becomes too stressful or an unhappy environment then athletes have a tendency to burn out and become susceptible to performance issues and potentially injury. If you observe a decline in your child's enjoyment then investigate and ask questions – What's going on at practice? Is it the coaching? Peer issues? Is it you? Keep in mind that just because you are involved in a competitive sport, does not mean that there is no room for some fun.

Remember the importance of building self-esteem

When your child is in an environment that boosts self-esteem they will learn faster, enjoy themselves more and perform better. Your positive esteem building interactions with your child are important to building their confidence and overall self-esteem. This is an especially important factor for girls participating in sport. Make sure your child feels good about themselves, and you will see them bloom, and even pay it forward with interactions with their own peers and in the future with their own children.

Words to say to your artistic swimming athlete . . .

Before Practice

Have fun
Work hard
I love you

After Practice

How was practice?
Did you have fun?
Keep up the hard work
I see your progress!

Before a competition

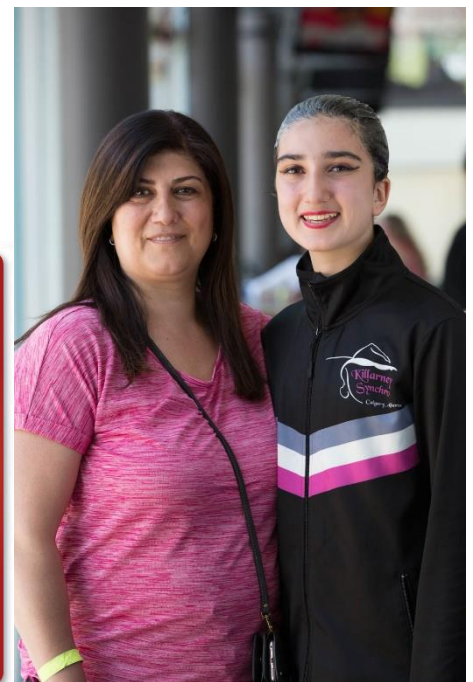
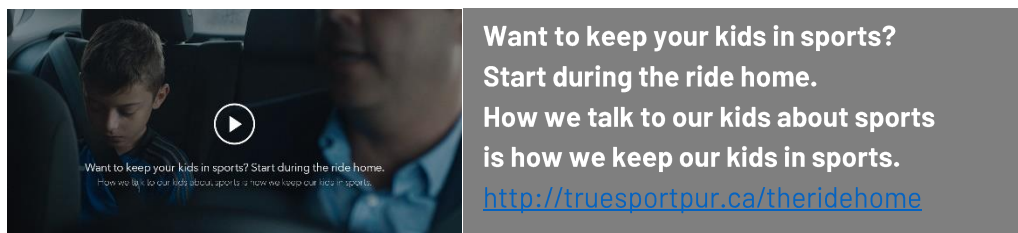
Have fun
Have a great swim
I love you

After a competition

Did you have fun?
I'm proud of you
I love you
I love to watch you swim

Supporting your child with positive conduct

As a parent it is important to ensure your actions and conduct have a positive impact on your child and support their journey in sport. This includes on the rides to and from practice and competition, your time watching practice or competition as a spectator, and your interactions with other parents, club coordinators, coaches, officials, volunteers, or sport organization staff. Canada's **True Sport Foundation** has some great tips and resources for parents including their wonderful "The Ride Home" video which you can link to view here:



Do

- ✓ Support your child unconditionally.
- ✓ Attend your child's games, practices and sporting events regularly.
- ✓ Cheer for and encourage your child, their teammates and their opponents.
- ✓ Model self-control, good problem-solving and conflict management skills.
- ✓ Appreciate and thank officials and encourage others to do the same.
- ✓ Encourage commitment, teamwork, respect and punctuality.
- ✓ Show appreciation to coaches and other volunteers for their contributions to sport.
- ✓ Encourage your child to strive for personal growth and excellence.
- ✓ Find ways to keep it fun!
- ✓ Be your child's biggest fan.

Consider

- ✓ Listening to your child to understand their motivation.
- ✓ Seeking feedback about your behavior from others to keep yourself in check.
- ✓ Practicing with your child at home. Play with them! Keep it fun!
- ✓ Speaking up when other parents, coaches, or spectators are behaving poorly.
- ✓ Volunteering to help out regularly.
- ✓ Not rushing your child through the fun stages. Let them be a kid!

Don't

- ✗ Let your emotions get the better of you.
- ✗ Yell out advice and criticism to your child or others.
- ✗ Ask your child to act one way and then model something else.
- ✗ Compare your child with others.
- ✗ Focus the sport experience solely on winning.
- ✗ Treat your child differently after a win versus a loss.
- ✗ Undermine the coach.
- ✗ Use the ride home to critique your child.

Canada Artistic Swimming encourages all parents to conduct themselves by the following principles:

- **Respect for all:** The dignity of all persons shall be maintained at all times and across all situations. Respect for Canada Artistic Swimming policies, decisions, and rules is part of the standard of behavior set by this principle. Respectful behavior across all interactions with Canada Artistic Swimming stakeholders (athletes, parents, officials, coaches, administrators, colleagues, partners, etc.) is a minimum standard for all.
- **Honoring Sport:** Fair play, self-control, and the ethical treatment of all people across training and competition environments reflects this principle in action. Sport Officials, athletes, parents, administrators, partners, sponsors, and Canada Artistic Swimming leaders must be treated with dignity and honored at all times. This principle is the hallmark of sport at its best.
- **Comprehensive Safety:** The psychological, social, and physical safety of every person must be the priority at all times. This principle is best understood when stated simply: Do no harm. An example of behavior that will be viewed as causing psychological harm is yelling or verbally abusing any person at any time. Physical safety violations include, but are not limited to, putting people in danger through ignoring potential risk factors, injuries, or emergency procedures.

Canada Artistic Swimming also encourages all parents to be aware of Club or Provincial Code of Conducts that are applicable to parents as well as the Canada Artistic Swimming Conduct Policy: <https://artisticswimming.ca/wp-content/uploads/2019/03/CAS-Conduct-Policy-Approved-Dec-3-2018-FINAL.pdf>



If parents would like more information/training in helping their athlete understand and value respectful behaviour in their sporting experiences the **Respect in Sport** program offers condensed, state of the art guidance in modeling good parent behaviour. The **Respect in Sport for Parents** program is available through the Canada Artistic Swimming website (www.artisticswimming.ca) by clicking on the **Respect in Sport for Parents** program logo link at the bottom right of the home page OR click on the Respect in Sport logo on the left.

Nutrition tips for your artistic swimmer

Fueling and hydrating your child properly during and after activity both in practice and in competition is a key role parents can play. These tips will help you understand the importance of a good diet and hydration and how to put in place simple steps which will be useful for both the general good health of your child and their performance.

Nutritional needs of athletes

An athlete's diet must be well balanced, supplying adequate energy and nutrients for optimum performance and providing for the repair and maintenance of tissues and for growth. The nutritional needs of an athlete in training are not significantly different from the requirements of all healthy individuals. However, athletes should pay attention to the following:

Eating a variety of foods – foods from each group should be eaten every day (grain products; vegetables and fruits; milk products; meats and alternatives)

Sufficient energy intake – there must be adequate dietary intake to meet the energy demands of training, competition, and body weight maintenance. Energy requirements vary according to age, gender, body composition, and amount and type of physical activity (related to exercise intensity and volume). In general, judged sports, such as synchronized swimming, require less energy than endurance events like triathlon, etc.

Sufficient carbohydrate intake – provided by the “grain products” food group, carbohydrate is the main energy source athletes rely on in most sports. Whether they are involved in high intensity, short duration events or in endurance events, athletes use carbohydrate as their main source of energy. Carbohydrate stored in muscles can be depleted after 75 – 90 minutes of moderate to high intensity activity. Low carbohydrate diets are NOT recommended for athletes.

Sufficient fluid intake – the need for water increases during exercise because of the loss of fluid caused by sweating and increased ventilation. This is important for all sports, including water sports, as dehydration can lead to a marked decrease in performance.

Sufficient protein intake – an athlete requires slightly more protein than a sedentary person in order to provide for adequate maintenance of muscle mass and repair of tissues. High quality protein choices should be consumed at each meal and snack and spread through-out the day.

Hydration, hydration, hydration!

Proper hydration is important for all athletes in order to replace water lost as a result of sweating, avoid marked decreases in performance that result from dehydration and help maintain core body temperature. It is well established that the sensation of thirst is not a good indicator of an individual's level of dehydration, one cannot gauge dehydration by referring to the sensation of thirst. Therefore, during exercise, it is important to drink on a schedule rather than according to thirst.

Drinking fluids before activity

Athletes should drink plenty of fluid every day, particularly before a practice session or competition. In practical terms, this means drinking 400–600 ml of fluid 2–3 hours before exercise. To ensure complete hydration, consuming 150–350 ml of fluid about 15 minutes before exercise is recommended.

Drinking fluids during activity

Athletes should drink enough fluid to maintain fluid balance throughout the exercise. The amount of fluid an individual can tolerate during exercise varies from one person to another, but usually ranges between 10–15 ml per kg of body weight per hour. For example, a 60 kg (130 lb) person can absorb between 600–900 ml of fluid in an hour. Rather than drinking large amounts of fluid at once, it is better to drink 150–350 ml of fluid every 15–20 minutes, or as much as one can tolerate without discomfort.

Nutrition tips for your artistic swimmer

Recommendations for replenishing reserves after activity

For rapid recovery, it is important that athletes refuel immediately after a practice session or competition, especially if another physically demanding event or training session is scheduled the following day.

Drink plenty of fluids - It is very important for athletes to drink after training and competition to replace fluid losses. At least 1.0 liter (4 cups) of fluid per kg of body weight lost during exercise, plus 500 ml is recommended. To rehydrate between competitions on the same day, follow the guidelines for hydration during activity.

Consume carbohydrates soon after activity - as soon as possible after exercise, preferably within 30 minutes, athletes should consume carbohydrate; this procedure should be repeated every 2 hours until the next meal. This allows muscle energy stores to be replenished at a faster rate than if the athlete waits until mealtime to consume carbohydrate rich foods.

The meal after exercise should be high in carbohydrate, adequate in protein, and relatively low in fat - Carbohydrate-rich foods should constitute the meals and snacks that follow an intense effort; to ensure carbohydrate stores in the muscles can be replenished quickly.

Eat potassium-rich foods (vegetables and fruit) - for example, vegetables, potatoes, fruit juices and fresh fruit, dried fruit.

Think ahead - Non-perishable foods can be brought to the competition or training site if food choices are limited there.

What to eat before a competition

On a competition day, the aim is to ensure proper hydration and sufficient energy to allow the athlete to meet the demands of the activity. Choose high carbohydrate but low fat foods, drink enough water and choose familiar foods.

Rich in carbohydrate - The pre-event meal must be high in carbohydrate (65-70% of total calories consumed). Fat and protein, which take longer to digest, should be consumed in smaller amounts. For instance, pasta, rice, cereals, potatoes, and bread are all appropriate, as they are high in carbohydrate and easy to digest and absorb.

Familiar - Since pre-competition "nerves" can upset the stomach, athletes should be familiar and comfortable with the food. In other words, they should have tried it before, preferably in training conditions.

Foods to Avoid - Avoid fatty foods, because they are slow to digest, protein-rich food, because they are slow to digest and are not needed as fuel during exercise, fibre rich foods and gas forming foods because they may cause upset stomach, and caffeinated beverages, because they can have a dehydrating effect.

Digesting before performing

The meal size and food choices will vary depending on the time between eating and performing. Athletes must allow sufficient time for digestion. High calorie meals, especially those high in fat content, take longer to digest than lighter, high carbohydrate snacks.

- Allow 3-4 hours for a large meal (approximately 500-800 kcal or more) to digest
- Allow 2-3 hours for a smaller meal (approximately 300-500 kcal) to digest
- Allow 1-2 hours for a small snack or blender/liquid meal to digest, or whatever the athlete's own tolerance indicates.

Common injuries in artistic swimming

Like most sports, there is a risk of injury to the athlete when participating in artistic swimming. Some of these injuries may be linked to the many repetitions of certain skills, training with improper form or due to collision or accident, like a concussion. The following table outlines common injuries in artistic swimming. It is very important that athletes learn to communicate any discomfort they are feeling to their parents and coaches so they can be informed and assist in seeking treatment. It is essential that follow-up is done with a medical professional, and most clubs and coaches have local community contacts to assist families if needed.

Injury: Neck (Cervical) Pain / Strain

Causes

- Poor posture – forward head posture in basic skills, at the tablet, computer, texting, etc.
- Weak deep neck (cervical) flexors/flexor muscles
- Neck musculature compensating for weak core muscles
- Repetitive, large, full head movements in routine choreography

Recommendations

- Posture education in daily activities and in water
- Exercises to strengthen deep cervical flexors/flexor muscles
- Monitor neck position during other exercises
- Modify volume and repetitions of painful choreography
- Ensure core training at each practice is included and completed

Injury: Hip Pain (Anterior Hip Impingement)

Causes

- Poor posture – anterior shear (stretching of the tissue) of hips and lower (lumbar) spine.
- Weakness and poor activation of gluteal muscles.
- Decreased centralization of hip joint
- Decreased hip mobility
- Repetitive large full movements in such skills as eggbeater, splits, etc.

Recommendations

- Posture education – standing and in water, using posterior pelvic tilt.
- Strengthening of gluteal muscles keeping good centralization of hip joint
- To improve proprioception (the sense of position of self and movement) use resistance band around the hip joint to pull the hip joint posteriorly
- Gentle, hip mobility exercises
- Decrease volume and repetition of painful movements
- Ensure core training at each practice is included and completed

Injury: Shoulder Pain (Rotator Cuff Impingement and Tendinosis)

Causes

- Poor posture – rounded shoulders, low sitting shoulder blades
- Weakness and poor activation of the rotator cuff causing poor centralization of the humeral head (ball portion of the joint) on the shoulder blade
- Poor scapular (shoulder blade) control and lack of upward scapular movement.
- Decreased mobility in extension and rotation of the thoracic spine (upper back)

Recommendations

- Postural education – standing, sitting, in water
- Strengthen rotator cuff (is a group of muscles and their tendons that act to stabilize the shoulder) with proper centralization of humeral head (ball portion of the joint)
- Exercises for scapular control and full upward rotation
- Mobility exercises for thoracic spine (upper back) rotation and extension
- Ensure core training at each practice is included and completed

Common injuries in artistic swimming

Injury: Adductor (Inner Thigh) Strains

Causes

- Repetitive stretch and contraction of the muscle during eggbeater, boosts and other figures
- Adductor can compensate for other weaknesses in the stabilizing muscles of the pelvis
- Decreased flexibility and mobility in the hip

Recommendations

- Strengthen the adductors at larger ranges of abduction with a resistance band
- Exercises for pelvic stability, adding co-contraction of the adductors and with larger ranges of movement in the hip
- Gentle, pain-free stretching and hip mobility exercises
- Ensure core training at each practice is included and completed

Injury: Lumbar Spine (lower back) – Facet Joint Irritation

Causes

- Excessive mobility at one level of the spine
- Reduced mobility at other spinal levels and in thoracic spine (upper back) and hip
- Poor lumbar-pelvic stability and weakness/poor activation of the gluteal muscles.
- Tightness in psoas (muscle located deep in front of the hip/pelvic area)
- Repetitive lumbar extension
- Poor posture – hyperextended, anterior pelvic tilt (when the front of the pelvis drops and the back of the pelvis rises) and anterior shear of hip

Recommendations

- Motor control exercises to promote even extension, rotation, side flexion throughout spine
- Mobility exercises for thoracic extension/rotation and hip rotation/extension.
- Exercises for lumbar-pelvic stability and extension exercises using the gluteal muscle as a driver
- Stretching and foam roller of psoas and hip flexors
- Decrease volume of painful movements in training
- Postural education – standing and in water
- Ensure core training at each practice is included and completed

Injury: Pain in front of the knee (Patella Femoral Pain Syndrome) and “breast stroker’s knee”

Causes

- Weakness in the gluteal muscles
- Hypertonic (overly toned) IT band (connective tissues that are located on the outer thigh and knee), TFL muscle (small muscle that lies just in front of the hip joint)
- Pain inhibition of vastus medialis obliquus (VMO) – an extensor muscle located medially in the thigh that extends the knee
- Increased torque on knee due to lack of hip rotation in whip kick and eggbeater
- On land – low arches with poor arch control, old shoes with reduced arch support or shock absorption

Recommendations

- Strengthen gluteal muscles
- Stretching and foam rolling IT band and TFL muscles
- Exercises for activation of the Vastus Medialis Oblique (VMO)
- Gentle mobility exercises for mobility of hip rotation
- Strengthen intrinsic muscles of feet, replace old shoes

Injury: Concussion

Causes

- Collision/hit to the head with another athlete, usually during routine practice (pattern changes underwater or highlights)
- Fall/impact on deck or side/bottom of pool

Recommendations

- It is essential that concussion protocol is followed and the athlete sees a medical professional immediately
- Follow “return to play” protocol under the supervision of a medical professional
- Consult Canada Artistic Swimming Concussion Policy and Management Protocol for specific information about prevention and treatment of concussion injuries

Glossary of terms

Definitions within this glossary apply to references in this document and also introduce important terms for parents which are fully outlined in the **Canada Artistic Swimming LTAD Framework 2.1**.

ABC'S: Agility, Balance, Coordination, Speed

Active for Life: is a movement within the Sport for Life framework in which Canadians become active for life by developing physical literacy. Along with physical literacy and sport excellence, Active for Life is one of CS4L's three key outcomes. This stage can be entered at any age (after the onset of the growth spurt), beginning with developing physical literacy in infancy, and evolves to being Competitive for Life, Fit for Life and/or Sport and Physical Activity Leaders through all phases of adulthood.

Adolescence: is the period during which most bodily systems become adult, both structurally and functionally. It is a difficult period to define in terms of the time of its onset and termination. Structurally, adolescence begins with an acceleration in the rate of growth in stature, which marks the onset of the adolescent growth spurt. The rate of height growth reaches a peak (PHV), begins a slower or decelerative phase and finally terminates with the attainment of adult stature. Functionally, adolescence is usually viewed in terms of sexual maturation, which begins with changes in the neuroendocrine system prior to visible physical changes and terminates with the attainment of fully mature reproductive function.

Athlete Development Matrix (ADM): A curriculum that needs to be covered in order to be successful in the sport. It describes aspects for the athlete's development in the areas of physical capacities, technical skills, psychological skills and life skills.

Canadian Sport for Life: is a movement to improve the quality of sport and physical activity in Canada. It links sport, education, recreation and health, and aligns community, provincial and national programming. CS4L's vision is quality programs for all Canadians based on developmentally appropriate sport and physical activity. CS4L's mission is to improve the health, wellness and sporting experiences of all Canadians by advancing physical literacy, improving performance and increasing lifelong participation in physical activity. When enacted, CS4L's values and principles link and integrate programs delivered by health, recreation, education and sport, and align programming in clubs, provincial/ territorial and national sport and multi-sport organizations. CS4L addresses the overarching system and structure of sport and physical activity in Canada, including the relationship between school sport, physical education and organized sport at all levels, from policy to program delivery

Childhood: Ordinarily spans the end of infancy – the first birthday – to the start of adolescence and is characterized by relatively steady progress in growth and maturation and rapid progress in neuromuscular or motor development. Childhood is often divided into early childhood, which includes preschool children aged 1 to 5 years, and late childhood, which includes elementary school-age children, aged 6 through to the onset of adolescence.

Chronological age: refers to the number of years and days elapsed since birth. Growth, development and maturation operate in this time framework.

Relative age: refers to differences in age among children born in the same calendar year.

Developmental age: refers to the degree of physical, mental, cognitive and emotional maturity. Physical developmental age can be determined by skeletal maturity or bone age after which mental, cognitive and emotional maturity is incorporated.

Skeletal age: refers to the maturity of the skeleton determined by the degree of ossification of the bone structure. It is a measure that takes into consideration how far given bones have progressed toward maturity, not in size, but with respect to shape and position to one another.

General training age: refers to the number of years in training in different sports.

Sport-specific training age: refers to the number of years since an athlete decided to specialize in one particular sport.

Cognitive Development: the development of the ability to interpret and process information.

Competition: an event where there is ranking with others. Source: *Canada Artistic Swimming Rule Book*

Competition-Specific Training: training that simulates or is specific to competition requirements.

Coordination: The ability to perform movements in the correct order, and with the right timing.

Development: refers to both biological and behavioural contexts. In terms of the biological, "development refers to the processes of differentiation and specialization of pluripotent embryonic stem cells into different cell types, tissues, organs and functional units" (Malina et al., 2004, p. 5). For behavioural, this term "relates to the development of competence in a variety of interrelated domains (social, emotional, intellectual, and motor realms) as the child adjusts to his or her cultural milieu – the amalgam of symbols, values and behaviours that characterize a population".

Emotional Development: the development of self-concept.

Federation Internationale de Natation (FINA): The international governing body for Artistic Swimming.

Glossary of terms

Figures: a combination of positions and transitions performed in the water, as defined in the FINA manual.

Free Routine: presentations in the water consisting of strokes, and figures, and parts and combinations of these performed to music. These routines may have required elements.

Free Routine Combination: a routine consisting of parts of solo's, duets, trios, and teams.

Fundamental Movement (motor) skills "FMS": refers to the set of movement skills that form the basis for all sports and physical activity.

Fundamental Sport Skills: refers to the set of sport skills that form the basis for all sports.

Growth: refers to the "observable step-by-step, measurable changes in body size such as height, weight, and percentage of body fat."

Source: Long-term athlete development plan for rowing: An Overview

Long-Term Athlete Development: is a multi-stage training, competition and recovery pathway guiding an individual's experience in sport and physical activity from infancy through all phases of adulthood. LTAD is athlete centered, coach driven and administration, sport science and sponsor supported. Sequential stages in the LTAD pathway provide developmentally appropriate programs for all ages to increase participation and optimize performance. Key to LTAD is a holistic approach that considers mental, cognitive and emotional development in addition to physical development, so each athlete develops as a complete person. Based on CS4L principles, LTAD, in a sport-specific context, promotes system alignment and integration between sport club, provincial/territorial and national sport organizations.

Maturation: refers to "qualitative system changes, both structural and functional in nature, in the organism's progress toward maturity."

Source: Long-term athlete development plan for rowing: An Overview

Motor Abilities: support the controlled execution of movements. Athletic abilities included in this category include: Agility, Balance, Coordination and Speed.

Peak Height Velocity (PHV): the maximum rate of growth in stature during the growth spurt. The age of maximum velocity of growth is called the age at PHV. The onset of the growth spurt, the fastest rate of growth, PHV and the onset of menarche are biological markers to identify the sensitive periods of accelerated adaptation to training.

Physical Abilities: are determined by the rate at which energy and force can be produced by the muscles, and by the range through which the movements can be executed. Athletic abilities in this category include: Stamina (aerobic

endurance), Maximum Speed, Maximum Strength, Speed-Endurance, Speed-Strength, Strength-Endurance and Suppleness (Flexibility).

Physical Literacy: means having the fundamental movement skills, fundamental sports skills and motivation that enable an individual to read their environment and make appropriate decisions while moving confidently and with control in a wide range of physical activities in both indoor and outdoor environments.

For parents: *Individuals are physically literate when they have acquired the skills and confidence to enjoy a variety of sports and physical activities.*

Sculling: A method of propulsion using arm actions that exert equal pressure to propel the body in the desired direction.

Social Development: the development of relationships with peer groups and the adult world.

Specialization: refers to athletes limiting participation to a single sport, which they train for and compete in on a year-round basis. There are sports that require either early or late specialization in order for an athlete to succeed.

Speed: The ability to rapidly move the body or a part of the body, or to execute a series of movements, in an all-out effort of very short duration (8 seconds or less).

Suppleness: the ability to move a joint smoothly through its complete range of motion without sustaining injury.

Technical Elements: Specific skills that have been identified in a routine.

Technical Routine: a routine with required elements as described in the FINA manual for senior and masters competitions.

Trainability: is the responsiveness of developing individuals to the training stimulus, at various stages of growth and maturation (Malina, Bouchard, & Bar-Or, 2004).

Training: Training is the process of developing an athlete according to scientific and pedagogical principles which, through planned and systematic actions on the performance capacity and readiness, aims to take the athlete to higher and superior performances in a sport or athletic discipline. (Harre, 1982)

Transitions: Connecting movements which enable the swimmer(s) to change from one movement to another; stroke to figure, eggbeater to layout, etc...

References, Resources & Acknowledgements

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Resources:

Canada Artistic Swimming: www.artisticswimming.ca

Sport for Life: www.sportforlife.ca

Physical & Health Education Canada: www.phecanada.ca

Coaching Association of Canada: www.coach.ca

True Sport: www.truesportpur.ca

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