

SALINE ROWING CLUB:  
*The Rower's Handbook*

Molly Visel '10

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## Forward

*It is my pleasure to have the opportunity to share this document a compilation of reflections, advice, wisdom, and principles gleaned over years of dedication to the sport of rowing - with you, the current student-athletes of the Saline High School Rowing Club. The content of this handbook exemplifies the spirit and culture of the rowing team we wish to establish at Saline High School. The guiding principles that are described can establish a culture that has a key component to developing successes of the club over the years. It is, therefore, our job to continue to strengthen and hone that team culture. Because of leaders and student-athletes, the support of the board and parents, the rowing club has, in the last decade, reached the highest level in the history of the program. We are an elite club; we are able to compete up to the National Level. We will only be able to continue this development if we follow the ideals and commit to the principles that we believe are the foundation of Saline Rowing since its inception in 2004. If we do that, future team captains and student-athletes may build on your successes and, motivated by the philosophy of perpetual improvement (“Kaizen”), to push Saline Rowing on to even greater heights.*

*Molly Visel ‘10*

*Assistant Coach, Saline Rowing Club*

*It is with great pleasure that the Saline coaches and the varsity rowers and alumni of the program say Welcome to our rowing team. As the club’s co-founder in 2004, I have been thrilled with the progress our program has made. Progress is certainly a product of a culture that expects your best in all aspects of your life, not just in rowing. We can compete at the highest levels of the sport because we have dedicated individuals who push themselves to be their very best and are satisfied with the fact that they know their teammates are doing their very best too. For you novices, I ask you to learn to push yourselves to be your very best. I appreciate your courage to join our crew. May you find a true culture of the team in the truest of team sports. Row Hornets!*

*David Fiske*

*Head Coach, Saline Rowing Club*

## Author's Note

*"All I knew is that I never wanted to be average. Whatever I was going to do, I wanted to do it my way. I just wanted the freedom to express myself. It wasn't about being different for the sake of being different. I just wanted to follow what I felt. My father put a challenge in front of me. I knew what he expected, but I expected even more. The expectations I had for myself were beyond my father's expectations. My thoughts were way beyond the idea of preparing myself for a job so I could be like the guy down the street. I had dreams. They were my dreams, and I had no fear of them."*

*--Michael Jordan*

*"If you have built castles in the air, your work need not be lost; that is where they should be. Now put the foundations under them."*

*--Henry David Thoreau*

The objective of this handbook is to pass on the lessons I've accumulated over the past fourteen years of rowing. These thoughts have been forming, crystallizing, breaking down, and reemerging through my experiences rowing at Saline High School, Grand Rapids Rowing Association, Grand Valley, Ann Arbor Rowing Club, and through various books and articles. The immediate intention is to share my opinion on the qualities of a successful student-athlete and oarsman. But it is simply that: an opinion. I encourage you in advance to expand on this as much as you can, to find what helps you achieve your personal best.

This handbook is NOT about winning a race. It is not about a points trophy, a regatta, a season, or forming a dynasty. This is not about winning a seat race or making a line-up. Nor will it give technical advice or long-term training programs, as those are developed and modified over time and between coaches. The intention is to explore the potential of the individual - to master ourselves and become the best we can be. All other success follows this self-discipline.

John Wooden, the coach of the UCLA basketball dynasty, defines two overarching rules for reaching our potential:

1. Never try to be better than anyone else.
2. Always try to be the best you can be.

Athletic success is not about a race, but about pushing ourselves to be our best. We cannot alter the speed or outcome of the race, the opposing crews, nor should we try. All we can do is focus on our own performance and improve ourselves with every opportunity. Also, when pursuing our best, realize that there is always room for more improvement. Even the best athletes in the world practice and train for long hours just to shave that hundredth of a second or make a small improvement in a skill.

Please treat the following as a guide. I do not claim that I have the final answer on any of the subjects covered; these are simply observations on the important aspects of improving as an oarsman and an athlete.

Molly Visel '10

## *The Rower's Handbook*

### SHS Athletic Code of Conduct:

#### Academics

*"I started out studying at night, but everyone else was studying then and there was so much movement and people wanting to chat and socialize that I started going to bed early in the evening and getting up very early in the morning to study. With no interruptions I got a lot more done in much less time. I could accomplish in two or three hours what previously took four or five, plus I got more sleep."*

--John Wooden

In any program, expectations need to be set prior to the start of the season. These expectations are extensions of a simple set of team priorities. First and foremost for students like us, academics are far more important than athletics. Education lasts longer than a race or a season, with farther-reaching effects. Though the trend seems to be that those who participate in rowing do better academically, if there is a conflict that cannot be resolved, school must come first. There is a reason why "student" comes first in the term "student-athlete". We need to take pride as a team to be one of the top-performing clubs at the school on an academic scale, and that expectation will extend across the team and history of the program.

Be a "Renaissance Man." This term describes a person who excels in a vast array of subjects or disciplines. Life is not simply a physical experience, nor is it solely academic. The best athletes excel not only in their sport, but also learn to apply their education and work habits to their other pursuits. This pursuit of excellence goes beyond the gym and beyond the water. Excellence in athletics is meaningless if the education offered is compromised. Never settle for good enough. Do not let the physical nor the mental aspect of life limit you.

- In what ways will you ensure that your academic tasks and assignments are completed?
- Do you have someone who will hold you accountable if you start to struggle?
- Do you have someone you can go to for help on academics?
- Do you have a set system of keeping track of your assignments, test dates, etc?
- How organized are you with your academic materials?

## Attendance

**Attendance is the first measure of individual commitment to any team sport.** Every athlete trains together so that the team as a whole benefits. In practice, bonds are formed that cultivate the nature of the team. In this manner, the team becomes more than the sum of its parts.

Even if an athlete is excused from practice, there will still be consequences that result from that athlete's absence. Rowing, like any other performance sport, requires a long progression of training and improvement, which is compromised by absences. During the fall and spring seasons, while training on the water, being excused from practice does not mean that your seat is saved in a boat. If an absence is unavoidable, expect to have to earn back the seat you left open. One of the purposes of team practice is to develop boat chemistry and to build a single unit out of many parts. If one athlete is missing, the seat does not remain empty. Instead, the next person gets their chance to contribute to the boat. **Any practices that are missed for any reason are expected to be discussed with all coaches as far prior to the event as possible.** In order to attend practice, you must have been at school for at least a half-day. Please schedule your appointments to not conflict with practice times.

- Do you have a reliable way of getting to practice? What is your backup?
- Do you understand that failure to attend practice (regardless of it was excused) jeopardizes your boating lineup?
- How will you notify a coach you will not be at practice? Who must you notify?
  - Correct Answer: The Athlete will email the Head Coach *AND* Your Direct Assistant Coach with your parent attached to the email

## Behavior

As a team, we are being judged everywhere we go and in everything we do. Not only do different programs form opinions of us at competitions, but we also leave impressions on the people of our own school as well. The students we interact with at school and the teachers who note our work ethic in the classroom are the people that support us financially and in spirit throughout our season. **What you do does not only reflect on your own character, but your family, friends, school, community, and team members. Our actions have a ripple effect on others around us. We must always present a positive image of ourselves and our program, which will help contribute to the long-term success of the program.**

When correcting behavior, fair does not mean equal. Expectations are much greater for team members that have experience or are in leadership positions. This is not simply limited to captains but is also true for upperclassmen and those on the varsity roster. As the level of responsibility increases, so does the severity of the punishments that follow. **It is not fair to punish a freshman - who probably does not know any better - to the same degree as a senior or captain, who is expected to lead by example.**

- Think of a behavior that you participated in recently that may have a positive ripple effect on the team
- Think of a behavior that you have participated in recently that may have a negative ripple effect of the team
- What could you have done to change that?



## Having Fun

Rowing is a repetitive sport. The goal of practice is to perfect one motion so that we are able to repeat it over two hundred times in a race, under pressure and through intense physical discomfort. Yet rowers don't continue their sport because they are masochists; there are elements of rowing that make the day-to-day sacrifices worthwhile. Finding these elements is crucial to maintaining the drive to continue long-term training.

Foremost, enjoy the people that you train with, both on and off the water. Some of the greatest gifts of the sport are the friendships forged in the fire of practice every day. Rowers easily become lifelong friends through the dedication and commitment forged in practice. After spending hours in the close confines of a boat, bus, car, or hotel, teammates are often those who know each other the best.

Make sure to enjoy the experiences as well. Though our time is devoted to preparing for the championship race, we won't appreciate the destination unless we can appreciate the journey. This means taking pleasure in the simple things. A quiet lake, wildlife, sunsets, or a morning sunrise can balance the effects of a hard workout or a long practice.

Also, do not mistake trips to races simply as long road trips. Rowing can take you all over the country, through both rural areas and cities. Do not take the traveling experience for granted. It is more than the time between two points. Some of the best memories are the adventures and misadventures that happen on the road or during overnight stays.

- In what ways do you plan to grow with your teammates this year?
- What events are you looking forward to, to develop team bonding experiences?
- Think of 3 people that you don't know well on this team
- In what ways are you going to attempt to get to know these teammates?

## A Note on Substances

To paraphrase Wooden again, it is far easier to break down our bodies between practices than it is to build them up during practice. This is especially evident in the case of drinking, using tobacco, using nicotine products, drugs, and partying. When ingested, alcohol, marijuana, nicotine, and other substances are treated as a toxin by the body and are broken down in the liver. The body then prioritizes breaking down the substance over repairing the muscle tissue broken down in training, resulting in an effective loss in performance gain. It is undeniable that training is compromised by substance use; everyone loses. Not only does the individual who is using substances miss the intended training effects, but the teammates in their boat also will go slower because of it. Using substances not only demonstrates a dismissal of respect for one's own training, but also for the training of the team, the commitment and effort of others, and the respect for the sport as a whole.

The use of tobacco and nicotine negatively influences the body's ability to send blood effectively and heal wounds. During our practices we are quite literally tearing our muscle fibers apart. In training, the muscle fibers separate and repair themselves, gradually growing more and more muscle tissue. Although it may not be physically visible, these are internal "wounds". After a difficult workout your body needs to repair itself in the fastest amount of time possible. Blood flow increases healing. If blood flow is restricted, healing is delayed. Your body will not be able to repair itself in the time necessary to make your practice progress your body's physical abilities, strength, or endurance.

**SHS Code of Conduct: "Use of illegal substances:** *Saline Area Schools recognizes that the use of tobacco, alcohol, and other drugs interferes with the physical, intellectual, social, and emotional development of our student athletes. Reflecting the prevention philosophy of both our athletic program and our school system, this policy's intent is to send a clear and consistent message to all athletes, coaches, parents, and program administrators regarding tobacco, alcohol, and other drugs. The adolescent use of tobacco, alcohol, and other drugs is illegal and presents a significant threat to an athlete's health and safety and to the orderly conduct of athletic programs. The additional safety factors associated with active, competitive participation give the athletic community an added responsibility to provide the safest and healthiest environment for all concerned.* **Substance abuse violation: The possession, sale, distribution of, or use of, any controlled substance or look-a-likes is not allowed and will result in immediate expulsion from the team and will invoke the Student Assistance Policy.** *Note: Refer to complete Student Assistance Policy (in SHS Handbook)"*

<https://salinehornets.com/substance-abuse-video/>

- Do you or anyone you know use substances?
- In what way do you feel substances influence the body in training?
- At what quantity or usage does influence on the body occur?
  - Correct Answer: The First Time, Any Time, and in Any Quantity.
- Make a contract to yourself and your team that you will take care of your body and keep it working at it's best by staying substance free.

## Self-Assessment

*“All the national champion coaches told me the key to going from good to great came in two areas: the preparation of the team and practice of the players. They were forever upgrading the preparation and sharpening their practice.”*

*--Tom Mullins*

According to John Wooden there are three foundations to sport. Conditioning is the physical, mental and moral preparation that is trained daily in practice. Insufficient conditioning leads to a decline in performance as effort continues.

The second foundation involves the technical fundamentals. To excel at a sport, an athlete must be able to execute the basic skills instantaneously and perfectly. A rower must be able to make the same technically correct motions without conscious effort for the duration of a 2000m race, while pushing physical limits and racing under the psychological pressure from other crews. These skills are learned and reinforced through repetition in practice.

Finally, an athlete must have team spirit. In rowing especially, the athlete must not only be willing, but eager to sacrifice personal glory for the sake of the team. In a race, the boat operates as one unit. If any oarsman stands out, most likely he is slowing the boat down. All energy must be transferred by all athletes together to move the boat.

**Before training can begin in earnest, a direction must be established. By definition, training is a means of improving physical or mental performance.** It can either be used to make strengths more prominent or to reduce limiting areas. Yet even before choosing a training plan, it is necessary to determine what your strengths and weaknesses are. Thankfully, the school employs our coaching staff for precisely this purpose.

The important criteria for an evaluation in rowing can be easily identified. Obviously, the first and last word in evaluation is boat speed. Physical ability, technical ability, and other factors converge here to move boats. Though ideally there should not be any difference, emphasis in evaluation is put on racing conditions over practice conditions. This is simply because **the goal of training is to prepare for the race; the objective is to find the crew that can consistently perform under pressure.**

Any race ultimately comes down to covering a set distance in the shortest amount of time. This means being able to achieve racing speed quickly and maintaining that speed throughout the race. Almost always, as a race progresses, speed diminishes, and many races are decided by the physical ability of the crew to hold on to the pace and rhythm they have established.

There are three main areas that converge that influence the outcome of a race; strength, endurance, and skill. Strength determines the maximum speed a crew can achieve, and combined with the weight of the crew and the equipment, result in the acceleration from a dead stop. Endurance allows an athlete to maintain a given force over time, and the effects of aerobic training usually won't be seen until the last 700 meters of a race. Skill on the other hand will not move the boat any faster but will transfer the energy of the athlete more efficiently to the boat. This allows the athlete to spend less mental and physical energy on technique.

Measurements that are made off the water also provide a good indication of potential on the water. The most pertinent of such assessments would be measuring the power-to-weight ratio of an athlete. Though strength allows a boat to attain maximum speed through the drive, excess weight reduces acceleration and increases drag.

One of the best land estimations of potential speed on the water is a weighted erg score. A weighted erg score is calculated through a [formula](#) that establishes a "pound for pound" estimate of who is faster. Your weight will never be published to other athletes and will be a private measurement between you and your coaches. Your weight is simply a benchmark assessment and should not be a "make it or break it" objective, instead, focus on growing your strength and your speed- your weight will follow.

The next words from anyone that has ever lost a seat-race are always, "But ergs don't float." There is a grain of truth in this - the erg does not account for many inefficiencies the way the boat does - but the fact is that no one can pull harder in a boat than they do on an erg. They may be more technically efficient which can win seat races, but they are not pulling any harder. Most often if an athlete can row decently and pull harder, he will be tough to beat in a seat race. To finish the axiom: Ergs don't float, but they don't lie, either.

Weight testing is also often used in evaluating athletes. The object of lifting is to strengthen the muscles used in the rowing motion, as well as those muscles that support their function in either stabilizing or antagonist movements. It is easy to read too much into max weight lifting numbers and it should be kept in mind that they are typically used to re-evaluate the load for the cycle progression, not make line-ups. One can also identify a limiting muscle group in relation to the others in the rowing stroke- whether the arms are stronger in relation to the legs or back. All muscle groups must be able to work in concert during the drive, so it is important to strengthen the weakest link. This is essential in injury prevention - to avoid imbalance between groups.

The second half of weighted test scores is measuring body mass. Body mass is relevant because more mass translates into more wetted surface area, and thus more drag on the boat, which makes maintaining boat speed more difficult. Invest in your training, and eat to fuel your body and muscles with the nutrients it needs in order to be successful. Oftentimes whole foods (those not from a package) provide our body



## How to Practice

*“These days, I hear a lot of talk about ‘getting up for a big game.’ No game should be any bigger than any other. People with fight can’t get up any higher for an important game because they get up for every game. When people with fight step onto the floor they always give everything they have to give, whether it’s for practice, a scrimmage or a championship game.”*

*--John Wooden*

All training begins and ends with a vision, a goal. That vision defines the direction and the commitment needed to achieve it and self-assessment determines how to get there. It is important to realize that all dreams have a price. If the goal is to win a national championship, there is a time that will be fast enough to win. The object then is not to simply beat another team, but to gain the boat speed necessary to achieve the winning time. The cost then is the work necessary to be capable of such speed. This price is not negotiable. **There are no shortcuts to gaining boat speed. It comes through the development of physical prowess, technical skill, and strength of will.**

## Principles of Training

*"Take a primitive organism, any weak, pitiful organism. Say a freshman. Make it lift, or jump or run. Let it rest. What happens? A little miracle. It gets a little better. It gets a little stronger or faster or more enduring. That's all training is. Stress. Recover. Improve. You'd think any damn fool could do it..."*

*--Bill Bowerman*

There are three main principles in physical training. The first is the principle of overload. In order to improve physical attributes, it is necessary to provide an adequate stimulus to the body. This stimulus provides enough “trauma” to the involved muscles to generate an adaptive response. The progressive stress on the body is the catalyst for physical adaptation. Over time performance depends on the sum of these adaptations. This is why intensity and commitment are essential in rowing. **No one grows beyond their limits without pushing through their current ones.**

The second principle of training is specificity. In any performance sport, the most beneficial activity is the sport itself. Performing the activity uses all the muscle groups that need to be trained. In rowing, the best physical training is on the water, which allows the exact motion to be trained as well as working technical skills. Off the water, erging is a close approximation of the rowing motion, though it lacks the technical feedback of training on the water. Cross-training is useful in rowing, yet not as a means of training the skill of the rowing stroke. Instead, activities such as biking, running, and swimming can improve aerobic capacity and facilitate the removal of lactic acid following hard training sessions in the boat or on the erg.

The last and arguably most important principle for performance athletes is reversibility. Simply put: Use it or lose it. The human body adapts itself to the level of demand put on it. If there is a long period of rest or inactivity, the body begins to lose the adaptations made during training. The same is true for lowering or decreasing the level of intensity in training. Thus it is important to continue training during long breaks between performances or competitions to avoid the loss of physical adaptations made up to that point.

- What does “Overload” look like to you?
- What does “Specificity” look like to you?
- What does “Reversibility” look like to you?



## Goals of Training

Training is an evolution. The end goal of training is to improve ourselves, to be the best we can be. Tony Dungy, the coach of the Superbowl champion Indianapolis Colts, stressed that the best teams focused on the simple things. The mastery of the fundamentals is where the most gains can be made in a team, not the inherent talent of the players. Bringing this concept to rowing, we may not be the tallest or the biggest, but we can be the most technically proficient. We may not be the fastest, but we will consistently be more intense, more focused. That, coupled with diligence in physical training, is the next level.

The culmination of so many days and hours committed to one discipline is the race. The erg pieces, the weight lifting, and the morning practices aren't simply ends in themselves - they serve a purpose for a larger cause. That cause is moving a boat down a 2000m course in the shortest amount of time possible. Practice then, is like building a fire. Some days you pile on tinder, other days you stack logs, and some sessions you even douse the pile with gasoline. All in preparation for the race. On race day, we light the match. The outcome of the race is determined by comparing the size of our fire against those of our opponents: Who has built the best and brightest?

- Do you plan to do anything “extra” to help build your fire brighter?
- What things can you do outside of practice to help your body continue to build itself?

There are no secrets in rowing. There are no trick plays or mid-race substitutions. What you see is all there is, and the only way to get better is through practice. The ratio between time spent practicing and time spent racing is staggering. We practice 10-15 hours a week for races that are under 10 minutes in duration. What separates the best crews from others is the quality of practice accumulated over the course of a season. Quality is important, because a bad practice doesn't simply provide no benefit, it can negatively affect performance and attitude. Being lazy and falling back on poor technique only reinforces bad habits.

The attitude that we bring to practice every day dictates what type of crew we will be. There must be an intention behind every practice, whether technical, physical or mental. Focus and concentration must be present in every training session, or there is little point in being there. Win the workout every day. If it is pieces, win the piece. If technical, strive to be the best at the drill or skill. Committing to winning the workout gives us the experience in practice that most crews only get during races.

How you practice is how you race. No one will row technically better during a race than they commit to during practice. Likewise, no one will be any more intense over the course of a race than they are during pieces at practice. Some people complain about having "on" and "off" days. The fact is, consistency is practiced. Practice with intensity each session. The fire will be there during tests and races.

There needs to be a sense of urgency in practice. The work to be done towards the goal cannot be put off to tomorrow. A race is not won in six minutes, it is won every day in practice over the course of a season. The goals set for every season should require attention on a daily basis, we have only a few short weeks to become the best we can be. Consider the teams you intend to beat. Do you think they will take a day off just because you do? The dangerous teams are the ones that will practice even harder to exploit the opportunity. If you simply maintain your level of fitness while other teams are improving, you are effectively getting slower.

The greatest enemy of achieving greatness is being satisfied with "good enough." As a team improves, it becomes easy to get complacent. The faster the crew, the less urgent training will feel. It is important to stay humble and continue focusing on making improvements. Practice is the tool to develop the necessary attributes for racing, as long as the focus remains on getting better, there will be no limit to improvements. It should never be enough to simply be at the same level as the major competitors. Practice to be the team that no one else wants to race.

- What attitude traits do you bring to the boat and the team?
- What attitude traits do you feel you struggle with?
- What traits that others have shown can have a tendency to negatively influence you?

## Self Coaching

In team sport, the amount of coaching you get is limited by the attention that is given by the coach. Yet, no one coach can give adequate attention to every athlete all the time, especially when that attention is divided between thirty or more athletes. Be able to critique yourself. This means that it is absolutely necessary to know what proper technique looks, feels and sounds like. Being able to self-coach takes away limitations on improvements during practice, and at the same time makes you accountable for your own progress.

The fastest oarsmen are not always the ones with the best erg times. Successful athletes have good erg scores that can be translated to boat speed through solid rowing. Likewise, the best programs demand the highest level of skill to accompany a strong physical foundation. Yet technical improvements are largely made through force of will, especially those improvements that involve breaking bad habits. There needs to be an expectation of perfection, of moving the boat perfectly. Demand correct technique from yourself at all times.

Lastly, remember to enjoy the process. If training is an evolution, it doesn't need one that burns athletes out. Have fun with the people that you row with. Without having fun, rowing becomes tedious. Congratulate yourself on improvements, then move on towards the next goal.

## Recovery

*"You can tear down more between practices than we can build up during practices. A lack of proper conduct, deficient rest and an improper diet will keep you from attaining and maintaining desirable conditioning."*

*--John Wooden*

When training, both coaches and athletes focus on the workouts. The goal of these workouts is to stimulate the body to improve its physical capacity. However, if the body is not given enough rest, the long-term effects of training will be a decrease in performance. Recovery and regeneration breaks down into two main categories, active recovery and passive recovery. Both facilitate healing after a training load and prepare the body for the next session. Proper recovery serves as prevention against injury and overtraining, ensuring an uninterrupted training season.

### Active Recovery

Active recovery is the use of low-intensity exercise after a bout of strenuous work or competition. This light work promotes faster processing of lactic acid in muscles and reduced soreness in the following days. For rowers, lactic acid is a daily experience. To help prepare for the next day's training, 20-30 minutes of low-intensity cycling, walking, or rowing is beneficial.

Flush exercises like these are not only good training tools, but can also be used to recharge mentally. Many cardio activities in the gym allow for reading and studying, which makes a great combination for student-athletes.

It is important to choose a good activity for the flush exercise. Getting full range of motion in the activity is critical for keeping muscles loose for following workouts. If the activity has a limited range of motion, muscles will become stiff and sore in following workouts. Doing a flush activity in the rowing motion ensures that the full range of motion is achieved.

## Passive Recovery

Passive recovery includes some of the easiest ways to recover, yet if neglected can lead to under-recovery and injury. The most critical aspect of this type of recovery is sleep. Without an appropriate sleep schedule, the body's capacity to heal is compromised. Mental function is also impaired by deficient sleep. As student-athletes, both of these areas are very important. The easiest way to have sleep improve performance instead of limiting it is to maintain an adequate amount of hours with a consistent sleep schedule. Going to bed at a consistent time allows the body to set its circadian cycles and optimize regeneration.

Consistently not getting enough sleep creates a 'sleep debt.' Over time, this limits the possible adaptations of the body, resulting in impaired physical and mental performance. Some research shows that cardiovascular performance decreases by 11%. The recommended amount of sleep for high school athletes is 9 ½-10 hours per night. Through the night the body goes through several stages of sleep that occur in sequence, so uninterrupted sleep is critical.

Other ways of facilitating regeneration include stretching, massage, and foam rolling. All of these help the body transport waste material (lactic acid) away from the muscle groups so it can be metabolized in the liver. The liver has a tremendous job to help transport waste and toxins. This helps reduce the stiffness and soreness in the days following a strenuous workout.

Stretching is the insurance policy in any long-term training program. Time spent stretching properly before and after training sessions helps prevent injuries and avoid potential problems in posture and body mechanics. Not only should stretching be used to cool down after a workout, but it should also be used to increase flexibility. Elasticity in the body is associated with less risk of injury, as well as allowing more comfortable rowing.

- How much sleep do you get on average?
- What ways do you feel you can increase your sleep?
- Do you stretch or do yoga in your free time at home?
- Do you have a foam roller or ever take Epsom Salt baths?
- Why is the liver crucial to an athlete? Besides metabolizing lactic acid, can it be overloaded by metabolizing other toxins? What do you think will take precedence?

## A Note on Injury and Overtraining

Today we hear quite a bit about the potential for overtraining in athletes. This phenomenon has been linked with stagnation in performance gains, fatigue, and injury. So when we find a performance plateau, we are quick to blame the training program rather than examine ourselves first. More often than not we are suffering from under-recovery rather than overtraining. If we feel tired or have not met our performance goals, we should first ask whether we have done everything possible to heal and recover before the next training session. In most cases, the limiting factor is our lifestyle. Getting enough sleep, eating well, and making healthy choices are easy ways to boost performance. **A quick indication of under-recovery is if one athlete is stagnating while other athletes are still making improvements.**

Some target areas include:

### 1. Physical

- Stretching: Massage, foam rolling, core exercises, yoga, pilates
- Nutrition and hydration
- Sleep

### 2. Mental

- Minimizing stress
- Mental exercises: meditation, visualization

Secondly, life happens. Unfortunately we won't always be in peak physical condition every time we step into a boat or onto an erg. Sometimes we will be sore, tired or aching. Yet there is a very definite line between being hurt and being injured, and it is important to know the difference. Simply hurting is not a good enough reason to back off a practice or to be excused, because in the last half of a race everyone is hurting. Injury on the other hand is a delicate situation. There is no reason to continue rowing with an injury to a point where there is permanent damage. At this point, there should have been medical attention involved. If there is such an event, it is given the priority. However, there are a variety of alternative exercises that facilitate training around common injuries. Unless there is an attempt to train as one's body allows, there will be little reason to rejoin the team midseason after a long "vacation".

- How will you differentiate "overtraining" from "overload" -- we use overload in our training cycles to get the body to adapt, can you identify some differences?
- What injuries or sensitivities have you noticed in yourself? What will you do to protect these and ensure they do not evolve into larger issues?

## Racing

*“Many people think that they will race their best race at their championship. However, this rarely happens. That is why you need to practice your best every time you are on the water.”*

*--Barry Klein*

There is nothing different on race day than any other time you are in a boat. In every case, the task is to make a boat go from point A to point B in the shortest amount of time. The “race” has the same objective as any piece or scrimmage. And this is the importance of practice.

Simply, the race is the culmination of all the work and effort that has gone into practice every other day of the year. The only way to really excel at racing is to excel at practice and preparation. In most cases, balance is the key in preparation. Limit the small mistakes every session that compromise the performance. Balance between limiting the negatives and maximizing the positives. Maximize the positive attitudes and how you feel physically.

- What concerns do you have about racing?

## Race Preparation

There are several different factors that can influence performance in a race that should be addressed prior to the event. The factor that is most relevant over the course of a season is physical preparation. You will never be any faster than your body will allow, and this athleticism is trained and developed over time.

The second most influential factor is mental preparation. Distraction, nervousness, or even apathy can all lead to needless mistakes that hinder top performance. Mental toughness, or the ability to maintain the right focus at the right time, is also trained. Being able to “get into the zone” before a planned effort allows focus to remain on the action itself, limiting technical mistakes. Be able to achieve this without effort; practice the right mentality. Distraction control can be practiced off the water through meditation and visualization. Visualizing yourself focusing on rowing through distractions and challenging situations helps maintain concentration in a race. Obviously, more experienced rowers will benefit more from race visualization, as they will be able to picture what a race will be like more accurately than a novice and can imagine possible racing scenarios and the appropriate reactions.

Leading up to the event, proper recovery and nutrition become increasingly important. As the event nears, the athlete should be preparing their body by making sure there is adequate sleep for recovery as well as enough fuel to keep the muscles ready for the race. For sprint races, carbo-loading is not as important as many suggest.

In fact, many athletes feel uncomfortable with the stiffness and heaviness that goes along with carbo-loading, and that may be a distraction from the task at hand. More than anything it is important to maintain a normal eating schedule before a race, to prevent any indigestion or psychological doubt that may result from ingesting new foods. Also, sports drinks, gels, and bars should never be experimented with on the day of a race. Instead, it is a better idea to experiment in practice first to discover any varieties that cause problems. Even in hydration, find out what makes you feel best at race time and when it is best to drink. For some, Gatorade before a race can cause cotton-mouth and it may be better to drink it the night before. Drinking an excessive amount of water can also cause an electrolyte imbalance that results in dehydration, so be sure to know what works by race time.

**The bottom line is this: feel comfortable and ready to race. Experiment as you like during practice, but know the best combination by race day. Know:**

### **1. What to eat**

### **2. When to eat**

As a crew, it helps to have set a pre-race itinerary that will be used at every race. Knowing when to wake up, to be at the boat, and when to launch normalizes the race so that all can prepare themselves accordingly. Before launching it is important to know the game plan. Though often too much emphasis is put on having a specific race plan, all athletes need to know the general structure of the race, and be able to commit to it. It will then be no surprise when a move comes or when a call is made.

The warm-up is also a balancing act. The goal of the warm-up is to prepare the muscle groups for work by increasing their blood flow and temperature. However, warming up too long or too aggressively can cause fatigue and dehydration. The best means of warming up is to find what works best for the athletes as a group, and this can be experimented over the season. Not only will this be sufficient for everyone physically, but it has the psychological benefit of being a mental anchor for preparing for physical effort. The warm-up should also depend on the environment; staying out too long in either the hot sun or a blizzard will hinder performance, so form a plan for different climates. Try to end the warm-up as close to the start time as possible, as the body will start to cool down immediately afterward. The object of the warm-up is to begin the race in the most prepared state, which should be at just at the conclusion of the warm-up.

### [What to take to a Regatta](#)

- Do you have any sensitivities to food that you have noticed?
- Have you found any foods that your body responds well to?
- What is the closest you should eat to a race? (Best case scenario--not hot seating)



## During the Race

The rowing race itself is simply a single performance by an individual or team. Other crews should not play a factor. Sometimes, for less experienced crews there may be psychological advantages to focusing on beating the other crews in a race, but, at the highest levels, a successful performance is simply covering the distance in the least amount of time. There is no way to alter the performance of another crew, just as they have no control over your performance. Thus, every race needs to be aggressive. There is less chance of getting a personal best if one waits for another team to go, and there is no way of getting to the next level unless you are constantly pushing your own limits. Obviously, sometimes you will come up short, but it is important to always fail forward, to always be searching for progress.

**The true racers in any sport are those with courage.** Those who are willing and able to hold their hand in the fire, even though it will hurt. Even though it will get burned. Though they may not win the race, they have found the capacity to empty the tank, to dig to the bottom of the well. In the words of John Wooden, "It's not about winning. It's about learning how to give all you have to give."

- What helps you feel prepared for a race?
- What things influence your nerves in a negative way?
- What helps ease your nerves?

## The Team

*“There are a lot of coaches with good ball clubs who know the fundamentals and have plenty of discipline but still don’t win the game. Then you come to the third ingredient: if you’re going to play together as a team, you’ve got to care for one another. You’ve got to love each other. Each player has to be thinking about the next guy and saying to himself, ‘If I don’t block that man, Paul is going to get his legs broken. I have to do my job in order than he can do his.’ The feeling between mediocrity and greatness is the feeling these guys have for each other.”*

*--Vince Lombardi*

The direction of a program is not dictated by one person. It is the collective will of the team. Every person must be working in the same direction and towards the same end. The coach alone cannot dictate what the team will be willing to give to achieve their best. The objective of the season must be communicated to all individuals, and there needs to be a commitment to it. The expectation needs to be that everyone will do what it takes to get there.

In sports today we are inundated with images of the superstar. Basketball players, football players and baseball players that stand out in their profession are put on a pedestal and showered with money and glory. The most important lesson on any rowing team however is that only two people have the right to use the term ‘I:’ single scullers and coxswains. The success of all other events rests solely on the ability for two or more people to work together towards a common goal. This teamwork is a powerful tool. The speed of a crew is much faster than the sum of its parts. On the same note, however, a crew is limited to the level of the oarsman who cannot row with his teammates.

The best crews are not simply the ones who have the best timing or blade work, they are the ones that are driving in the same direction, towards a single goal. If all athletes on a team commit to a single goal, and all know what the price is to get there, there will be very little standing in their way. Everyone must be a part of the process, and must feel able and willing to contribute their skills to the goal. This means that everyone must also be accountable for their contribution, and should encourage their teammates in doing the same. Always encourage your teammates. They are the ones that will pick you up when you fall, that will push you when you hesitate, and will share the victory with you at the end of the race.

In any program there are boats and athletes that have done well and are idolized and praised. The transition between a program that infrequently produces good boats to being a great program involves a shift in attitude from the athletes. **There must be a priority of the team above the individual. On this note, the best leaders of this type of team are those with the best work ethic and team spirit. They are not those who are the fastest, because there is nothing inspiring about being naturally gifted. Instead it is the individual that comes in and goes to work every**

**day regardless of his spot on the ladder, because he knows that he is making everyone faster. In this way, any athlete can become a team leader by trying to attain his personal best. The true leaders on any team are those who show a relentless pursuit of their personal best, and who are satisfied with nothing less.**

Finally, the outcome of any team is a product of everyone involved. Widespread success does not come from one athlete, coach, or benefactor. Instead, it is a work ethic and daily commitment and expectation that contributes to a sustained period of greatness. There are no secrets in rowing, and as a team sport, success must come from the team.

What will you commit to this season to help make you as an athlete the best you can be, and this team it's best: