

1 **2007 Breaststroke Camp**

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 Sean Hutchison, King Aquatic Club
 David Marsh, Mecklenberg Aquatic Club
 Dave Salo, USC / Trojan Swim Club

2 **The best definitely look different...**3 **...but here's what all of the best do well.**

- Maintain forward velocity throughout the stroke
 - Minimal "stop-and-go" action
- Get the most out of the kick and forward drive
 - Races are won in the spaces between the strokes

4 **Leisel Jones, 2007 Worlds 200 brst final**5 **Scott Usher, 2004 Olympic Trials 200 brst final**6 **The key to the best breaststroke:**

Making the pieces
 work together

7 **1 + 1 =**

- It's about more than just pulling and kicking
- Make it all work together to:
 - Keep moving forward
 - Swim downhill on the extension/kick

8 **Making the pieces work together comes down to:**

1. Line of the body
2. The pull set-up
3. Timing of the kick

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9 **1. Line**

- The core is the key to transferring all of your energy forward.

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- At the peak of the stroke
 - Maintains speed...minimizes "stop-and-go"
 - Don't over-arch your back and get too high
 - Best opportunity to use the core on extension

11 **1. Line**

- At full arm extension
 - Drive forward through the core
 - Extend with the body, not just the arms
 - With core engaged, you'll get everything you put in and more

12 **1. Line**

- Hold the best body line through the extension
 - Maximize distance per cycle
 - Affected by everything that happens earlier

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14 **2. It starts with your pull & breath.**

- The pull sets up your line and timing
- Have a distinct outward scull
- Get propulsion and breath on inward pull

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- Avoid:
 - Pulling back too soon
 - Breathing too early
 - Pulling back too far
 - Lifting the body up too high
- All of these things will hurt your line

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16 **3. Timing**

1. Set-up for the kick
 - Start the knee bend towards the end of inward pull
 - Prior to set-up, hold the line through the core
 - Should be fast

17 **3. Timing**

2. Push back with the feet and legs
 - Start to push back when upperbody is lined up
 - Arms just reach full extension
 - Head gets in line

18 **Jessica Hardy / Rebecca Soni**19 **Mark Gangloff / Brendan Hansen**20 **Diff'rent Strokes.**

Common qualities of the best breaststroke:

- Using your body in the stroke
- The pull sets up the body, not just propulsion
- Good timing

21 **Pullouts**

- Body line is just as important for maximum velocity and efficiency
- Keep the arms in a strong position
 - Not behind the body
- The dolphin kick
 - A lot of variation
 - Timing and size of the kick

22 23 **Pullouts**

- Timing
 - Downbeat of the kick should take place when the hands pass the chest
- Size
 - Keep the dolphin kick compact
 - Kicking too big will hurt the body line

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24 25 **The End.**