

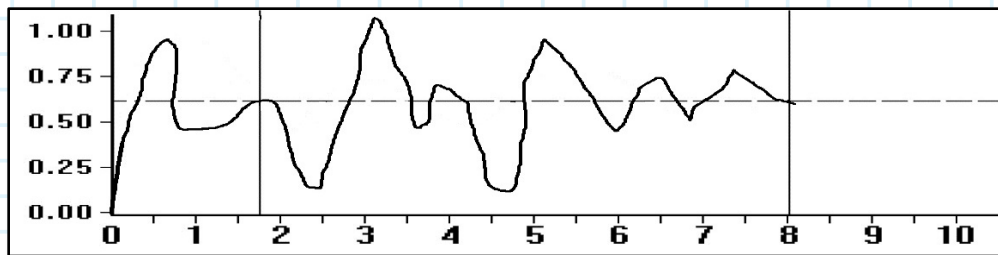
## Proper Breath Holding During a Fit Test

**Problem:** Fit Test fails for a specific individual. Traceline shows large fluctuations. Test returns a “zero” fit factor.

**Solution:** Addressing the subject with a modified breath-holding technique or utilizing a nose clip may steady the traceline and pass the test.

When testing with the Quantifit, the test subject must hold his breath so that an air-tight seal can be achieved in the mask.

Ordinarily, the test subject would take a “medium or comfortable” breath and hold the breath as if swimming underwater. But occasionally the test subject may be challenged to actually close the airway and in essence is only holding his breath *back*. The airway remains open and the Quantifit does not have an effective seal to conduct the test. This results in a “tug-of-war” between the Quantifit and the subject which creates a traceline that looks like a mountain range.



To address this problem, it may be necessary to re-instruct the test subject to take a normal breath in and then *swallow*. The swallow reflex will force the airway closed and allow a successful test.

Another approach if that is not successful is to utilize a low-profile nose clip similar to what swimmers would use. This will assure a good seal, assuming the subject after taking a breath, has closed his mouth with his lips pressed firmly together.

