## "How do I get more endurance?" Clint 'Pops' McLaughlin

There is not a single answer to this. Some people have one problem while others may have all of these. Plus there are other factors I'm leaving out because it would take days for me to list them all. Endurance is affected by:

- 1. Muscle strength
- 2. Pressure
- 3. Work-load
- 1. The muscle strength issue should be a NON -issue. It takes 4 minutes a day to build and maintain more lip strength than a player will ever need. You need to use an isometric exercise to strengthen lip muscles. This has nothing to do with playing it is to build lip muscle. Take an unsharpened pencil and support it between your lips by the eraser like a cigarette. Do not use your teeth (keep them closed). Use the lip muscles to keep the pencil in place and horizontal.

At first 30 seconds will seem like a long time. Your goal is to do this 3-4 minutes a day. Once you can do the entire 3 -4 minutes at one setting you are done. Do not do more than 4 minutes any day. It can stiffen the chops and hinder flexibility, tone soft playing etc. Think of this as weight lifting.

2. Pressure is something we all need to use. However; many players use more than needed. I've had players come to see me who use more mouthpiece pressure to playlow c than I use to play high c. This is just wearing the lips down for no reason. We get in this habit when we first start playing. WE use pressure to form and close the embouchure in order to play higher than second line g. Our lips get stronger and we gain control over our embouchures. But if we don't work on unlearning our elementary school habit of using pressure; then we keep it. (I did this too. And I had to retrain myself.) We can't just stop using pressure. We have to fix the reason why we started using pressure. Focus the vibrating area of the lips. Lip Buzz 15 minutes a day. This allows the lips a chance to learn how to create their own corners instead of just stopping the buzz where the mouthpiece touches the sides. When I buzz a high c my buzz is less than half the width of my mouthpiece diameter. When you play that note and allow the mouthpiece to make your corners then you lose focus and need too much mouthpiece pressure. Work on soft playing. So soft that yo u almost can NOT hear it. That will help you learn to control a small lip aperture for playing high with a good solid center. I like Clarke Technical Studies # 1. You want to almost not be able to hear it but still have each note speak.

## 3. Work -load

We can take some of the work off of the chops by making a better use of air and using a closer lip set. Project the notes where they belong. The notes have to project to be heard. The higher notes have a smaller vibration and lose energy faster than low notes.

WE want to project notes like this:

Low G rolls out of the bell,

Low C goes out 5 feet, Second line G goes out 8 feet,

3rd space C goes out 12 feet,

G on top of the staff goes out 20 feet, High C goes out 40 feet, G above high C goes out 80 feet.

Relax the stomach muscles. Tension only hurts the sound. Tensing the stomach muscles does NOT create a smaller body cavity or pressurize the lungs. Bringing the abs in toward the spine and contracting the muscles around the girdle does create a small er body cavity. That moves your guts (intestines, liver etc) and since the pelvic bones won't let them go down; they have to go up. That makes the part of your chest cavity available for your lungs smaller. And that places the air in the lungs under pressure. Pull the stomach in farther for each higher note.

Lip set point. Take line 1 of page 125 in the Arban. It is a C Major scale with every other note jumping down to low G. If you start on the Low G the middle c is hard for some players. If you set (and play) a middle c first and then start the high notes are easy. I make my students do a 2 octave C scale. They set and play a G on top of the staff and without resetting they start the exercise. It is easy to compress the lips to play a half an octave h igher than your set point. It is easy to learn to relax and (drop the jaw) to get to a full low g. The G on top of the Staff should ALWAYS be you starting point. That way you have a base from which to judge where every note is in relation to your starting aperture/tension level. This gives you more endurance instantly as the lips do less work on every note.