The image on the computer monitor will look the same whether you are using an 8-, 10- or 15-megapixel camera.

If your usual need is for “snapshot” quality, you can bump up these figures by 50 percent, but either way, I think it makes it pretty clear that the 12- and 15-megapixel cameras won’t make a big difference, unless you plan to print 8-by-10 inch photos.

The image on the computer monitor will look the same whether you are using an 8-, 10- or 15-megapixel camera.

Or to put it another way: if you have a choice of a 10-megapixel camera that’s perfect for your needs and preferences, or a 15-megapixel camera that would force you to compromise on the features and controls you want, don’t buy the 15-megapixel model just because it has more pixels.

When you are evaluating digital camera systems, I would recommend that you work with a company that specializes in systems designed for the dental market. Two well-known companies are PhotoMed and Lester A. Dine.

Both produce systems that include all the hardware and software that a dentist would need to get started in digital photography, although they take different approaches and have subsequently different costs of their systems.

The PhotoMed systems are typically cameras with all components included, such as a macro lens, flash diffuser or ring flashes, memory cards and battery charger.

These systems normally start around $1,200 and can go as high as $5,000 depending on the camera type and attachments that you purchase.

In part two of this article, we’ll cover making the move from analog to digital.

Extraoral cameras
While intraoral cameras have many benefits, there have always been some roadblocks for dentists who wished to use them in the office.

As I stated earlier, there is a learning curve associated with their use; most have an upside-down image and so using them is similar to using a mirror in the mouth.

What most dentists wanted was a way to use cameras that they are already familiar with, which is the extraoral camera. The problem, for a long time, was the unavailability of digital cameras.

While there are many ways to get traditional photos into a digital format (more on that in part two of this article), it is still much more desirable and easy to have digital images from the start.

When the first digital cameras for consumer use were introduced, they were very expensive and, although they were suitable for the home, they did not meet the criteria for producing diagnostic dental photographs.

The first units that came out were 1.3 megapixel cameras. Since then, we have seen 2.1 megapixel units, 5.3 megapixel units and, lately, 12 and 15 megapixel cameras.

Because the issue of pixels is often misleading and confusing, here is a short primer on pixels.

Pixels primer
It helps to remember that pixel count doesn’t determine how good the image is — only how large a good print you can make! Image quality is determined more by lens quality, the imaging chip and its control circuitry, etc., not to mention the ability of the photographer to control those factors.

To put the “how big” issue in some kind of perspective: the rule of thumb I use is that with a continuous-tone print device such as a dye-sub or good quality ink-jet printer, you need to provide 500 pixels per inch in the print to provide “high quality” photographic results — ones that will stand up to close scrutiny and still look photographic.

If you can settle for “snapshot” photo quality, i.e., images that will be examined casually at normal reading distance or better, then you can get by with 200 pixels per inch in the print, and for “display” quality — meaning prints that will be viewed from several feet away — you would be OK with 100 pixels per inch or even less.

(Keep in mind that these quality levels are strictly my own personal preferences. Some people might be perfectly happy with 50-pixels-per-inch images.)

Anyway, if you’ve got a 2-megapixel camera (typically about 1,290 by 1,600 pixels in the image) the biggest print you can make and retain what I think of as “high quality” is 4 by 6 inches.

A 5-megapixel camera (let’s assume it’ll be 1,500 by 2,000 image pixels) will let you make a print of 5 by 7 inches at the same “high quality” level. That’s a difference of about an inch each way.

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A graduate of USC, he earned his DMD from Boston University and completed his residency at the Eastman Dental Center in Rochester, N.Y. He received his specialty training at the University of Washington and went into private practice in Vermont until moving to California in 2002 to establish DTC, a company that focuses on the specialized technological needs of the dental community.