

Providing the best possible medical care to all residents of the region is a heartfelt concern of the Palm Beach County Medical Society. And maintaining one's health is a critical component of experiencing a productive life. In the past several years I have had the pleasure of providing a brief synopsis of major medical advances over the past 12 months and hope this will be helpful again.

Millions of patients depend on life-saving transplants every year and finding a way to supply organs that are not rejected by the body's immune system is critical. 3-D printing has become the answer. Formerly approved for creating joint implants, the technique is now effectively used to produce blood vessels, ovaries, and the pancreas – with more organs on the way. This emerging technology will give many people a chance to replace diseased organs and enjoy better health.

Many patients have disorders that require measuring the temperature and pressure in one's brain. Heretofore, surgical procedures were used to insert and later remove the devices. Now the creation of bioresorbable electronics makes it possible to place a sensor in the brain which dissolves when no longer needed thus eliminating the need for additional intervention.

Asthma is a very common and bothersome condition. Inhalers are useful but research showed that 94% of patients use them improperly. So Bluetooth-enabled inhalers have been developed. A small device is attached to the inhaler which records the date and time of each dose and whether it was correctly administered. The data is then sent to the patient's smartphone. Clinical trials show that patients' respiratory condition improved by 82% !!

In the telehealth area, highly-personalized apps have been developed that allow patients to speak virtually with physicians and other health professionals to receive instant medical advice. This does not replace the need to have face-to-face appointments, but it provides a measure of reassurance while waiting for appointment times.

Until recently heart valve replacement has required open heart surgery and long painful recovery periods. Now through the use of catheters placed in a vein near the groin and passed upward to the heart, a newly structured heart valve can become effective immediately and many patients are back to normal within a few weeks. This is a transformational advance.

And it's certainly worth mentioning that there are recent advances which require careful evaluation by your health care advisors to assure their appropriate usage and application for you. The Keto Diet, for example, has gained popularity as a means of losing weight by markedly reducing caloric intake of carbohydrates. It is being promoted also for its potential for making chemotherapy and radiation more effective in treating cancers, improving blood levels of "good cholesterol", strengthening cognitive function especially in children, establishing better hormonal balance in women with ovarian disorders, and even correcting skin conditions such as acne. However, there are concerns about the diet causing arterial plaque if not properly followed. Therefore, the word of caution about seeking professional advice. The well-established Mediterranean Diet, fortunately, has passed the test of time.

This article makes no preferential statements and, of course, all therapies must be approved by your medical care provider. It is offered as a guide, among others, in seeking the medical attention which best suits your needs and those of family and friends. Wishing you the very best in the New Year and New Decade. To your good health !!!