

LIFE

More study needed on artificial sweeteners

Q My doctor said I have diabetes and need to eat less sugar. Are foods with artificial sweeteners healthy? I hear on the news people should avoid them. JM, Greenville.

A We can't give you a complete answer to your question about artificial sweeteners as more studies are needed to confirm or refute the concerns being voiced in social media as well as in scientific literature. Even so, Nolan Davis, a fourth-year Brody



KATHY KOLASA

medical student working with Dr. David Collier, Director of the ECU Pediatric Healthy Weight Research and Treatment Center shares here what they know about consuming foods and drinks with erythritol, a sugar alcohol.

Vending machines, gas stations and grocery stores across eastern North Carolina are filled with "sugar-free," "zero sugar," "diet," "diabetic-friendly" and "keto" foods and beverages. The common element is they all include artificial sweeteners. Like you, others are asking if diet soft drinks are healthy or should they just drink a regular soft drink if managing their weight or diabetes.

About 1 in 10 adults and an increasing number of children in North Carolina have been diagnosed with diabetes. Their health care providers have counseled them to limit their added sugar intake to cut calories to lose excess weight and better their health. One way, they have been told, is to replace sugar with artificial sweeteners including sugar alcohols. This seemed like good advice as the Food and Drug Administration has found artificial sweeteners in amounts usually consumed by adults are safe. Sugar-sweetened beverages like soda, lemonade and sweet tea are



ZETY AKHZAR/SHUTTERSTOCK

Stevia is a very concentrated sweetener from stevia leaves and erythritol — derived from corn via fermentation — is added to give the product volume and texture. Producers are not required to list how much is in the product.

significant drivers of weight gain and increase glucose or blood sugar levels.

Adults and children are advised to drink water but if that isn't their preference, they often are encouraged to switch to diet soft drinks or "sugar-free" lemonades and teas. There is significant buzz — especially online — about low-carb diets including the "keto" diet for weight loss. I am not writing about the pros or cons of this diet, but need to mention its popularity because many of the sweeteners used in the low-carb diets include sugar alcohols like erythritol.

It is an ingredient — alone or in combination with other artificial sweeteners — found in many processed sugar-free products and recipes for sugar free popular dishes and baked goods found on Facebook, Twitter, Instagram — and just about everywhere. Let me clarify that the term "alcohol" refers to the chemistry behind sugar alcohols. They are vastly different from alcohol that can be an intoxicating agent.

The increased use of erythritol sparked safety concerns about it. You will see it listed on the ingredient labels of lower calorie ice cream, candy, gum, cookies, cakes, protein bars and fruit spreads. It is naturally found in some vegetables and fruits but in very low amounts. Unlike sugar, it is not metabolized

or broken down by our bodies and leaves the body through urination without giving the body any calories to use. It is considered "zero calorie" or "non-nutritive."

It is also in a sweetener called Truvia, a brand of stevia-based sugar substitute. Stevia is a very concentrated sweetener from stevia leaves and erythritol — derived from corn via fermentation — is added to give the product volume and texture. Producers are not required to list how much is in the product, but we found one product with 0.5% stevia extract and 99.5% erythritol.

A recent study from internationally recognized researchers showed consuming erythritol was associated with an increased three-year risk of major adverse events including stroke, heart attack or death. Remember "association" is not cause and effect.

The researchers also examined how consuming erythritol in artificially sweetened beverages affects an important part of people's natural clotting system or platelet function. Increased erythritol levels makes the rate of "thrombus formation" or "blood clotting" increase substantially. This can increase risks for heart attack, stroke, organ damage or death. Importantly, the erythritol levels studied were in the range

of the levels found in study subjects' blood levels and remained at levels 1,000 times higher than they were before eating or drinking "sugar free" keto products.

Other small studies showed college students consuming products with erythritol led to weight gain, not weight loss. After reviewing these high-quality studies published in peer reviewed journals, Dr David Collier, a board-certified pediatrician with a clinical focus on Pediatric Healthy Weight, has changed his practice. He no longer recommends but suggests his and other high-risk patients avoid erythritol containing products — especially since consumers cannot tell how much erythritol is in a product.

While more research is needed to confirm these findings, if you are concerned about the effects of consuming erythritol and/or added sugars on your health, use the ingredients list and the Nutrition Facts label to choose your food and drinks. There are many other options. Dr. Kolasa promises to discuss in this column other sweeteners making the news, soon.

Professor emeritus Kathy Kolasa, a registered dietitian nutritionist and Ph.D., is an affiliate professor in the Brody School of Medicine at ECU. Contact her at kolasaka@ecu.edu.

Diminishing sex life calls for communication

DEAR Abby: My boyfriend and I are in our late 20s and have been together six years. He's a great boyfriend, and I'm happy in every way except one. Since we moved in together a year and a half ago, our sex life has dwindled down to practically zero. Sometimes we go months without it. We are busy with work and school, but I'm not sure if that's just an excuse. I know it's partly my fault because I should also take the initiative and not be lazy. I'm wondering if we're just not right for each other. Aren't the 20s supposed to be a time of sexual fun and frequency? Or does it even matter? Maybe we're just



ABIGAIL VAN BUREN

different from the norm? — **CONFOUNDED IN CANADA** **DEAR Con-founded:** If you haven't been talking with your boyfriend about this, you should be. At your age, it is unusual for partners to go for months at a time without having sex. Perhaps before you moved in together, sex was sexier because you weren't together as often. But the bottom line is, if you're not happy with the relationship as it

is, it needs to be brought out into the open so it can be dealt with as a couple.

DEAR Abby: I'm a 20-year-old female in a situationship with a 46-year-old married man. He tells me he's going to leave his wife when his daughter graduates, which is in two months. He wants to move me to his state, but my family isn't supportive, so I would like an outside opinion. — **CONTEMPLATING IN FLORIDA**

DEAR Contemplating: How long have you and this 46-year-old man been romantically involved? I have concerns on several levels about what you are contemplating. First is the age

difference and the balance of power in your relationship. Next is the fact that he hasn't yet left his family or even filed for divorce. Many men promise to leave their wives but never do. Divorces can drag out for years if they are contested, and his marriage has been a long one.

Slow this relationship down. I urge you not to move until he's free to marry, you have a job and are able to support yourself and any children that could result from this union. Let your family get to know him. They have your best interests at heart, so resist the urge to tune them out in the name of love.

HOROSCOPE

BY EUGENIA LAST
United Feature Syndicate

Take time, sort through information and consider every angle before considering a move this year. A steady pace forward, paying attention to detail and taking a minimalist approach to living and doing things your way will result in less stress and a chance to make healthy decisions. Stand by your word, and don't make unrealistic promises. Positive change begins with common sense.

LEO (July 23-Aug. 22) — When in doubt, refrain from making a promise. A reserved approach will buy you time, offering the space you need to consider what's best for you. Make stress relief your priority.

VIRGO (Aug. 23-Sept. 22) — Let your intuition guide you to what and who can help you succeed. A medical or

financial situation will cause uncertainty if not handled with care. Don't share personal information.

LIBRA (Sept. 23-Oct. 23) — Declutter your life and lower your overhead. A definitive attitude will help you refurbish your life and set higher standards. Surround yourself with people who share your concerns.

SCORPIO (Oct. 24-Nov. 22) — Consider what you want and must do to position yourself for success. Don't give others the impression you are flexible when you are not. It's up to you to make things happen.

SAGITTARIUS (Nov. 23-Dec. 21) — Be honest with yourself and others, and take the initiative to do things for yourself while being considerate of others. Protect your heart from anyone who sends mixed messages.

CAPRICORN (Dec. 22-Jan. 19) — Speak up, run the show and embrace changes that help you live the life you long for. Don't give anyone the right or means to dictate your next move. Have no regrets, and be true to yourself.

AQUARIUS (Jan. 20-Feb. 19) — Refuse to let the changes others make or the temptations you encounter throw you a curveball. Let your heart be the judge. With patience as your barometer, you'll find peace and happiness.

PISCES (Feb. 20-March 20) — Don't allow anyone to use emotional manipulation to lead you astray. Use your intuition, experience and intelligence to maintain equality and take control. Map out the path that suits your needs.

ARIES (March 21-April 19) — Refrain from signing up for something you cannot afford or that risks injury. Protect

against people trying to coerce you. Focus on self-improvement and personal happiness.

TAURUS (April 20-May 20) — Offer only what you can deliver, and be prepared to give a play-by-play overview for those who need extra input. How you define yourself and what you offer will make a difference.

GEMINI (May 21-June 20) — Be a good listener and decide what others want from you before you engage in plans that leave you at a disadvantage. Work by yourself to achieve the most with the least amount of interference.

CANCER (June 21-July 22) — Someone will take advantage of you if you let them. Veer toward unusual situations that offer lessons, experience and connections. Use your skills to make home improvements.

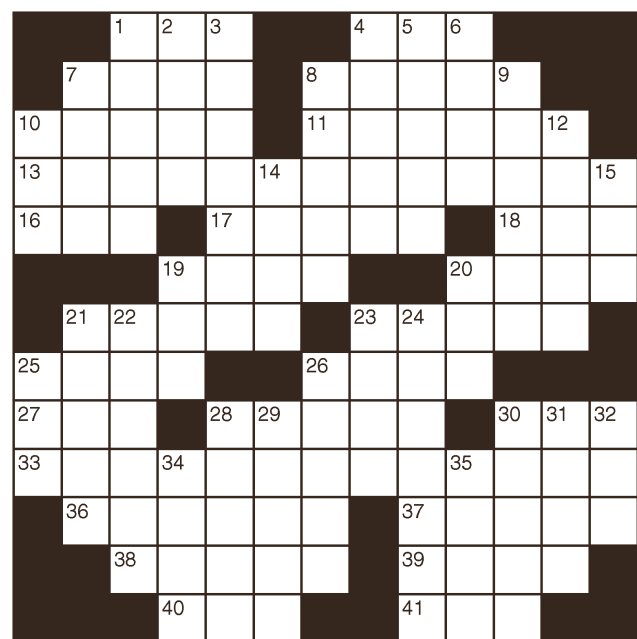
CROSSWORD & CRYPTOQUIP

ACROSS	26 April forecast	DOWN	10 Cyndi Lauper's "— Bop"
1 Spigot	27 Rock channel?	1 Aquarium favorite	12 Discard
4 English land	28 Snares	2 United —	14 Work units
7 Lima's land	30 Online chats, briefly	3 Morally strict	15 Beer barrel
8 Guided trips	33 1993 hip-hop classic by Ice Cube	4 Sacha Baron Cohen role	19 Spy org.
10 Ravi's instrument	36 Tranquil	5 Docu-mentarian	20 Fall from grace
11 Quiver contents	37 Pollster's find	6 Gator's kin	21 Trousers
13 Jazz pianist whose '80s hit "Rockit" became a hip-hop classic	39 Herbal drinks	7 Painter Mondrian	22 Acknowledged
16 JFK info	40 Orig. texts	8 Western resort	23 Mafia boss
17 Easy gaits	41 Tin Man's need	9 Feels faint	24 Creamy Italian dish
18 Mine material			25 Luau necklace
19 Nicolas of "Moonstruck"			26 Stormed
20 Hitch			28 Russian rulers
21 Partner of aches			29 Hotel posting
23 Like fresh apples			30 Perfect
25 Volcanic flow			31 Supplies with staff
			32 Pink Floyd's Barrett
			34 Eve's guy
			35 Zwei follower

Solution time: 23 mins.

D	A	L	Y	A	H	I	E	C	C	E	
A	L	A	I	N	I	N	F	O	I	L	
W	A	R	P	G	R	A	F	F	I	T	
G	R	A	P	P	L	E	E	E	R	I	E
O	T	T	E	R	G	R	A	T	I	F	Y
M	A	E	S	A	S	S	E	A			
G	R	A	M	M	Y	S	T	R	U	D	Y
H	A	Y	D	N	G	R	A	V	I	T	Y
G	R	A	D	I	E	N	T	E	R	I	E
W	E	L	L	M	A	H	T	I	N	A	
Y	A	L	E	T	W	O	S	T	S		

Yesterday's answer 8-9



8-9 CRYPTOQUIP

IXSPPOI BOJP' RSOLD MSXN
IEHINLHOHW S KOJNETP EWLN
RSPMNHOHW KOP GNXM:

"MKN TWXD GTIBXOHW."
Yesterday's Cryptoquip: WHEN A FELLOW EMBARKS ON A DIET REGIMEN PROHIBITING BREAKFAST PASTRIES, HE BANISHES DANISHES.
Today's Cryptoquip Clue: W equals G

The Cryptoquip is a substitution cipher in which one letter stands for another. If you think that X equals O, it will equal O throughout the puzzle. Single letters, short words and words using an apostrophe give you clues to locating vowels. Solution is by trial and error.
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BRIDGE

BY PHILLIP ALDER
United Feature Syndicate

Today's contract was a modest one no-trump, reached by South's opening bid in the fourth position. The weak no-trump, showing 12-14 points, enjoys some popularity around the world, especially in the countries of the British Commonwealth. The fear that it will cost a large penalty if doubled and the responder has a flat nothing is greatly exaggerated. In addition, it occurs 25% more often than a 15-17 no-trump, and it is difficult to compete against. (You must bid constructively, not obstructively, because you could have the values for game.) My wife and I love the weak no-trump and are well ahead from using it.

West decided not to lead away from his black-suit holdings. Instead, he selected the heart seven: five, jack, ace. Declarer returned the heart nine, which East ducked, then the heart four. East would have done best to switch to a black suit, but he had been reading a learned article about surrounding plays, so he led the dia-

North		08-09-23	
♠ K 8 5			
♥ Q 10 8 5			
♦ 10 8 4			
♣ 10 9 2			
West		East	
♠ A J 6 3		♠ Q 9 4	
♥ 7 6 3		♥ K J 2	
♦ 7 6		♦ K J 9 2	
♣ A Q 5 4		♣ J 8 6	
South			
♠ 10 7 2			
♥ A 9 4			
♦ A Q 5 3			
♣ K 7 3			
Dealer: West		Vulnerable: East-West	
South	West	North	East
	Pass	Pass	Pass
1NT	Pass	Pass	Pass
Opening lead: ♥7			

mond jack. Declarer finessed the queen and then immediately paused for thought when West played the six. Clearly, East had switched from the K-J-9 of diamonds. Accurately, South unblocked the diamond eight from the dummy. Next, he led the diamond three: six, 10, king. Later, when declarer got into dummy with the spade king, he cashed the 13th heart. Finally, he led the diamond four and, when East played the two, finessed his five. Cute — it isn't often you have the A-5 sitting over the 9-2 that late in the play of a suit.