



August / September Newsletter

Abdominal Hollow *vs* *Abdominal Brace Contraction*

When you are at your exercise class, yoga or pilates class, do you use the abdominal hollow or brace technique? Have you been given either one to assist with rehabilitation and recovery from a back pain injury? Both are used to assist with core stability and protect your back from injury and pain.

New research has been done that may help make the distinction between the two and help decide which is more effective as spine stabiliser.

The abdominal hollow aims to activate the deep core muscles of transverse abdominis (one of your abdominal muscles) and multifidus (one of your lower back muscles). At the same time it wants to keep larger muscles like rectus abdominis and the obliques relaxed. The technique of the hollow is to draw the lower abdomen inwards toward your spine.

The abdominal brace focuses on recruiting all of the abdominal and low back musculature. This contraction aims at tensing the trunk without drawing the abdomen in or out.

A recent study by Stanton and Kawchuk published in the journal SPINE 2008 Volume 33, Number 6, pp 694-701, looked at these two types of abdominal contractions in 28 asymptomatic subjects to determine if there was a difference in spinal stiffness (one measure of spinal stability). The abdominal brace was the winner as it provided an immediate stiffening effect that was significantly greater in magnitude when compared with rest and abdominal hollowing. Abdominal hollowing produced increased stiffness compared with rest. No gender differences were found and also there was no significant effect of age. The study noted that future research was needed to determine the long term effect of repeated contractions on spinal stiffness and low back pain.

So perhaps employing the abdominal brace rather than the hollow may provide more protection and stability to your spine whilst doing various exercises and activities of daily living.

Danny Croker

Have You Taken Your Daily Supplement of

Sunshine



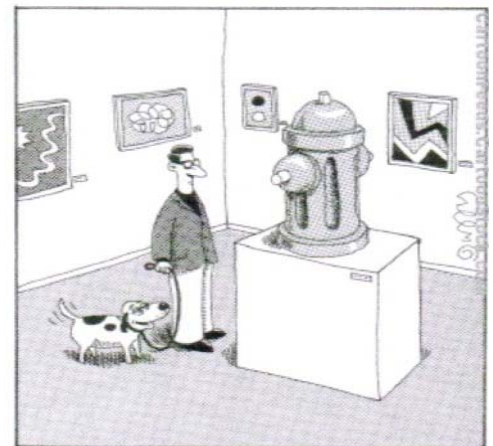
The right amount of sunshine is essential to life. Sunshine affects your moods, your lifestyle, and is essential for your immune health.

In order to produce enough Vitamin D a light coloured skin would need to have their arms and legs exposed to full sunlight for 20mins everyday (avoiding the hottest part of the day). For a person with dark skin, would need about 2 hours a day. Sunscreen block stops the production of Vitamin D.

Laughter

Laughter is the best medicine. Laughter benefits our wellbeing. It

- ☺ exercises and relaxes muscles
- ☺ improves respiration
- ☺ stimulates circulation
- ☺ increases the production of pain killing endorphins
- ☺ decreases the production of stress related hormones
- ☺ enhances immunity



"I don't know art, but I know what I like."

Danny Croker

B.Sc.(UNSW), M.Chiro. (Macq.Uni)
Chiropractor

Steve Eddy

B.Chiro Sc., M.Chiro. (Macq.Uni)
Chiropractor

Vitality Health Care

Christina Sacchetta

BHSc (Comp Med) ND Dip RM
Remedial Therapist
Naturopath

Christine Copp

Practice Manager

Wade Stuchbery

5th year Chiropractic Student

432 Rocky Point Road
Sans Souci

T: 95294008

Your health is our concern but your responsibility. If you are unable to keep your appointment, please let the clinic know as soon as possible, and be sure to make up your missed appointment.

Superfood

Chia Seeds

(*Salvia Hispanica* L.)



Let me introduce the superfood used by Aztecs, Mayas and Native Americans, the Chia Seeds. The use of Chia Seeds dated back to 3500BC. Chia Seeds was an integral element in the Aztecs religion and spiritual culture, a symbol of energy and life, consumed specifically for greater energy by warriors.

Chia Seeds are tiny white or black seeds, known as the perfect food for their balanced ratio of essential fatty acids and nutrients. The seeds have not undergone any processing. You can sprinkle them over or add them to just about anything – muesli, salads, smoothies or yogurt, without disturbing the flavour.

What makes Chia Seeds a Superfood?

Contains Essential Fatty Acids - 32-39% in a ratio of 3:2 of omega 3 to Omega 6. This is an important ratio for the critical production of appropriate prostaglandins – making it a high anti-inflammatory.

Essential Fatty Acids are **Omega 3 and Omega 6**. Chia is the highest plant source of Omega 3. We need Omega 3 in our diet; everything from depression to heart disease to eczema can be caused from a lack of Omega 3 in the diet.

Essential Fatty Acids play an integral part in:

- Maintaining the fluid and rigidity of cellular membranes
- Mediate immune response
- Regulate response to pain, inflammation and swelling
- Regulate pressure in eye and joints and blood vessels
- And many more benefits

Chia seeds are **antioxidant-rich** that protect delicate essential fatty acids from oxidation.

Contains Protein – up to 23%

- It is a complete protein, containing all the essential amino acids
- It is gluten free

Contains Fibre – 37.5g per 100g

- A source of soluble fibre.
- The seeds have a mucilaginous properties – helping to cleans and sooth the colon - strengthening the peristaltic action of the intestines and eliminating efficiently and regularly.
- Excellent to help eliminate constipation.

Contains Vitamins and Minerals

- Rich source of B vitamins
- 5 times more calcium than milk by weight
- 15 times more Magnesium than broccoli
- 3 times more iron than spinach
- Rich source of phosphorus, potassium, zinc, Boron

Have You Taken Your Daily Supplement of

Brain Exercise

Take a break and exercise the brain a puzzle

- **Improve memory**
- **Better concentration**
- **Increase alertness and awareness**
- **Lift up moods**

Puzzles can be found on the last pages of the newsletter



"He said he wasn't good enough for me, so I married him because he's the first man to realize that."

Research

Meta-analysis confirms blood pressure lowering benefits for dark chocolate

The results of a meta-analysis published online on June 28, 2010 in the journal *BMC Medicine* found a blood pressure-reducing effect for dark chocolate consumption in individuals with hypertension and prehypertension.

For their review, Dr Karen Ried and her associates at the University of Adelaide in Australia selected 15 trial arms of 13 studies which evaluated the effects on blood pressure of compounds in chocolate known as flavanols. "Flavanols have been shown to increase the formation of endothelial nitric oxide, which promotes vasodilation and consequently may lower blood pressure," Dr Ried explained. "There have, however, been conflicting results as to the real-life effects of eating chocolate."

Pooled analysis of all trials found that participants who received daily cocoa or chocolate for at least two weeks experienced a significant reduction in blood pressure compared with those who received a placebo. Further -analysis determined that blood pressure was only lowered in those with hypertension or prehypertension, while those with normal blood pressure did not experience a significant reduction. "These findings are in line with meta-analyses of other nutritional supplements on blood pressure, which similarly found that blood pressure was significantly reduced in hypertensive subgroups but not in the normotensive subgroups," the authors write. "The relatively modest but significant blood pressure-lowering effect of cocoa in the hypertensive subgroup is clinically relevant: a decline of 5 mmHg in systolic blood pressure may reduce the risk of a cardiovascular event by about 20% over 5 years," they conclude. "Furthermore, the effect of cocoa in a hypertensive population is comparable to other lifestyle modifications, such as moderate physical activity (30 minutes/day) [which] may reduce systolic blood pressure by 4-9 mmHg."



Chia Seeds are highly hydrophilic, with the ability to hold nine times their weight of water. This ability can prolong hydration and retain electrolytes in body fluids especially during exercise.

There is no substantial difference in composition or nutritional value between the white or black seed. The different nutritional composition is related to soil type and climate the crop is grown. The major producers of Chia Seeds are Australia and South America.

Chia seeds are highly nutritional food that helps maintain good health – not a cure for any disease.

Have You Taken Your Daily Supplement of

Exercise

40 minutes a day of exercise results in:

- Enhances quality of life
- Alleviates depression
- Improves cardiovascular function
- Helps melt away those few extra Kilos
- Improves mental acuity
- Contributes to stronger bones - increasing mineral density of bones



Have You Taken Your Daily Supplement of

Healthy Eating

Include protein rich foods in your diet.

Fish, poultry, meat, eggs, dairy, legumes, Chia seeds

Enjoy at least three cups of fresh vegetables daily

Enjoy at least of two piece or one cup of fresh fruit every day.

Limit starchy carbohydrates to two small serves per day.

Limit high Glycaemic load foods such as bread rice, pasta and cereal to one –two servings daily.

Include nuts, seeds and healthy oils in your diet.
A small handful of nuts – ¼ cup daily; two tablespoons of oil for cooking and salad dressing daily.

Drink at least 8 glasses of pure water every day.

Ways to use Chia seeds

- Sprinkle over cereal and muesli.
- Use them to coat rissoles, meatloaf or burgers - they add a pleasant crunch to the exterior just like poppy seeds
- Because of their neutral taste and light colour, white Chia seeds make an ideal part-replacement for white flour in home baking.
- Replace 2 tablespoons of the flour with white ground Chia seeds.
- Mix 1 or 2 tablespoons of the seeds into one cup of water and add the gel to smoothies and yoghurts.



"He was just saying that all things come to him who waits, and, sure enough, along came a lightning bolt."

Pumpkin, Ginger & Apple Soup

Serves 4

- 50g butter
- 1 onion, finely chopped
- 2 gloves garlic, crushed
- 4cm piece ginger, finely grated
- ½ teaspoon ground allspice
- 1Kg butternut pumpkin, peeled, seeded, cut into 3cm pieces
- 4 small red apples, 3 peeled, cored, roughly chopped
- 1.5 litres chicken stock or vegetable stock

Heat 30g butter in a large saucepan over low-medium heat. Add onion and garlic, and cook for 5 minutes or until soft. Season with sea salt and freshly ground black pepper. Stir in ginger and allspice and cook for 1 minute. Add pumpkin and chopped apples, cover and cook, stirring occasionally, for 10 minutes or until pumpkin begins to soften. Add stock and simmer for 20minutes or until pumpkin is soft. Cool soup for 5 minutes, then purée, in batches, in a food processor. Return to pan, season, and then reheat over low-medium heat.

Meanwhile, thinly slice unpeeled apple width wise. Remove seeds. Heat remaining butter in a pan over low-medium heat and cook apple, until golden brown.

Serve soup topped with apple slices, with buttered toast.



Prevalence of Hamstring Injuries

Hamstring injuries remain a challenge for both patients and clinicians, given their high incidence rate, slow healing and persistent symptoms. One third of hamstring injuries will reoccur with the greatest risk during the initial 2 weeks following return to sport. This high early reinjury rate is suggestive of current rehabilitation programs may be inadequate at resolving possible muscular weakness, reduced tissue extensibility and altered movement patterns associated with the injury.

The Mechanism of Hamstring Injuries

The occurrence of hamstring strain injuries during high speed running is generally believed to occur during the terminal swing phase of the gait cycle. During the second half of the swing phase the hamstrings are active, lengthening and absorbing energy from the decelerating limb in preparation for foot contact. The greatest musculotendon stretch occurs in the biceps femoris tendon, which may contribute to its tendency to be more often injured than the other two hamstrings (semimembranosus and semitendinosus) during high speed running. Running related hamstring strain injuries typically occur along an intramuscular tendon. During recovery from injury, the hamstring must be properly rehabilitated to safely handle high eccentric loading when returning to running.

Hamstring injuries that occur during activities such as dancing or kicking can occur during either slow or fast movements that involve simultaneous hip flexion and knee extension. Such movements place the hamstrings in a position of extreme stretch with most injuries occurring in the semimembranosus tendon at its proximal end (Tibial tuberosity insertion). These injuries tend to require a prolonged recovery period before an individual is able to return to a previous preinjury performance level.

While the age of the individual and a prior history of a hamstring strain have been consistently identified as injury risk factors, modifiable risk factors include hamstring weakness, fatigue and lack of flexibility with a strength imbalance between the hamstrings (eccentric) and quadriceps (concentric) being identified. Furthermore, limited quadriceps flexibility and strength and co-ordination deficits of the pelvic and trunk muscles may contribute to hamstring injury risk. As a result current rehabilitation programs typically include a combination of interventions targeted at each of these modifiable factors.

Presentation

The majority of individuals with a hamstring injury present with sudden posterior thigh pain resulting from a specific activity, most commonly high speed running. Patients may describe an audible pop with the onset of pain more common to injuries involving the proximal tendon. Patients may also complain of pain in the ischial tuberosity (sitting bone) when sitting most commonly when the proximal tendon is involved. Because hamstring injuries have a high rate of reoccurrence, patients may report a previous episode often adjacent to the new injury site.

The mechanism of injury and tissues injured are important in evaluating the rehabilitation time needed to return to reinjury level of sport performance. Indeed, injuries involving the biceps femoris (high speed running; intramuscular tendon) require a shorter recovery time, than those involving the proximal tendon (dancing/kicking; semimembranosus).

Severe injuries where there is a complete or partial rupture of the hamstring muscle result from extreme and forceful hip flexion and knee extension and require an operation with extensive post-operative rehabilitation.

Classification of Hamstring Strains

Hamstring strain injuries are typically classified according to the amount of pain, weakness and loss of motion, resulting in the following classification system.

Grade 1 = Mild

Grade 2 = Moderate

Grade 3 = Severe (complete tear or rupture)

These injury grades reflect the underlying extent of muscle fibre or tendon damage.

Medication Use

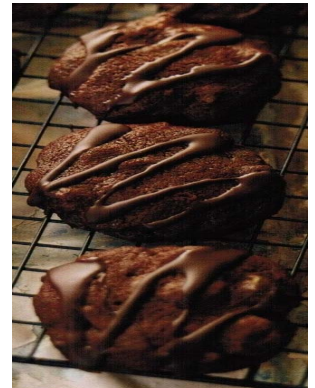
Nonsteroidal anti-inflammatory drugs (NSAID's) may be used after the initial days following the injury. However, investigations have shown that there is a lack of benefit and possibly negative affects on muscle function following recovery, which has resulted in controversy regarding their use.

References available upon request

Steve Eddy

Dark Chocolate Cookies with Pistachios and Milk Chocolate Chunks

185g unsalted butter, softened
275g brown sugar
2 eggs
1 ¼ cup (185g) plain flour
2/3 cup (70g) good quality cocoa
1tsp baking powder
150g milk chocolate, cut into chunks
110g pistachio kernels
100g dark chocolate



Preheat the oven to 180 C and line 2 large tray as with baking paper.

Beat the butter and sugar with electric beaters until thick and pale. Add the eggs one at a time, beating well between each addition, until well combined.

Stir the flour, cocoa, baking powder and a pinch of salt into the butter mixture and beat slowly until well combined.

Stir in the milk chocolate and pistachios.

Dollop 24 heaped tablespoons of the mixture onto trays. Flatten the dough slightly using damp hands, then bake for 12-15 minutes until cooked through. Cool on trays for 5 minutes, then transfer to a wire rack to cool completely. Once cool, drizzle the biscuits with melted chocolate, then allow chocolate to set. Store in an airtight container for 3-4 days.

(Delicious Magazine August 2010)

WELLNESS review

Detox

Is Toxicity the Reason You Feel Unwell?

Ask yourself these questions:

- Are you often tired or lethargic?
- Do you regularly suffer from bloating, diarrhoea, constipation or other digestive disturbances?
- Do you get recurrent headaches?
- Do you regularly suffer from muscle aches and pains?
- Does poor short-term memory and concentration affect your ability to function at work?
- Do you have allergies or sensitivities?
- Do you suffer from depression, anxiety and/or mood swings?

If you answered "Yes" to one or more of these questions, your body may be overburdened by toxicity.

Toxicity – A Modern Epidemic

The modern world is full of many man-made chemicals and it seems that we are not only what we eat, but also what we drink, breathe and touch. Even before you step outside the house in the morning, you are potentially being exposed to a myriad of toxins. Eating breakfast, washing the dishes, applying cosmetics and perfumes, and even having a glass of unfiltered water, can potentially increase your exposure to harmful compounds which may compromise your health and vitality.

The good news is that your body has an amazing ability to eliminate these toxins through its inbuilt detoxification systems. However, your body can become overwhelmed with accumulated toxins over time. If you haven't been feeling quite right or you answered yes to any of the above questions, then perhaps you should consider a healthy step-by-step detoxification program to give you back your bounce!

You Are What You Eat

Today's poor dietary and lifestyle habits coupled with the ever-increasing use of pharmaceutical drugs are major contributors to toxicity. In fact, the majority of our exposure to toxins comes from the inappropriate dietary choices we make. To start making healthier dietary choices and become less toxic today, just follow these simple tips:

- Eat plenty of fresh seasonal fruit and vegetables. If you can, buy organic, if not be sure to wash them well.
- Drink 2-3 litres of filtered water per day and avoid alcohol, caffeinated beverages, soft drinks, dairy, and commercial fruit drinks/juices.

- Enjoy a wide variety of fresh, healthy snacks and avoid overly processed and refined snacks such as chocolate, bakery products, chips, and lollies.

Ask us today about more dietary tips that can reduce your toxic load and increase your vitality!

Safe and Effective Detoxification

Detoxification within our bodies is a complex process that requires several steps to be completed effectively.

A good starting point of a healthy detoxification program is to reduce the toxic load coming from your diet. Herbs and nutrients can also play a vital role in supporting your body's key elimination systems. The following supplements contain key ingredients which play an important role in ensuring that you detoxify safely and effectively:

- **Antimicrobial herbs.** Extracts from herbs such as *Thymus vulgaris* (Thyme), *Oreganum vulgare* (Oregano), *Artemisia annua* (Chinese Wormwood) and *Juglans nigra* (Black Walnut). These herbs exert antibacterial, antiparasitic and/or antifungal actions which aid in the removal of harmful organisms from the gastrointestinal tract. These organisms produce toxic chemicals and can damage gut integrity. Antimicrobial supplementation is therefore a fundamental part of any healthy detoxification program.
- **Probiotics.** Supplementation with beneficial bacteria can help to create a healthier environment in the gastrointestinal system. Probiotics also produce natural antimicrobial substances which prevent the growth of harmful organisms.
- **Prebiotics and healing nutrients.** Prebiotics promote the growth of beneficial bacteria in the gut and reduce bowel toxicity, whilst healing herbs and nutrients help to reduce inflammation and support healthy gut repair. A healthy gut stops ingested toxins from passing into the bloodstream and causing further damage in the body.

Using a safe and effective step-by-step detoxification program can help to revitalise your health and wellbeing - so what are you waiting for? Make an appointment today with our qualified practitioners who can help get you on the path to a cleaner, healthier lifestyle.

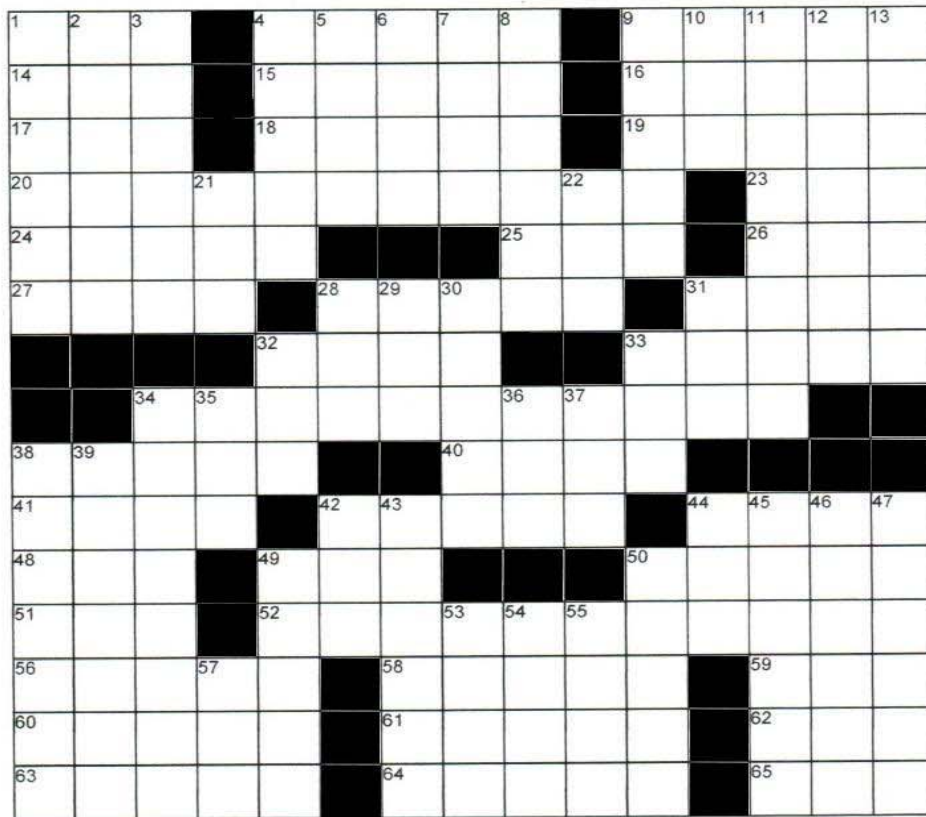


Puzzles

Sudoku

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 3 | | 4 | 7 | | | | 2 |
| | 4 | 9 | | | 6 | 3 | | |
| | | 1 | 2 | | | | 5 | 8 |
| | | | 9 | 2 | | 1 | 3 | 7 |
| | 8 | | | | | | 6 | |
| 9 | 7 | 3 | | 1 | 5 | | | |
| 5 | 1 | | | | 9 | 2 | | |
| | | 4 | 8 | | | 7 | 1 | |
| 6 | | | | 5 | 4 | | 8 | |

Crossword



Across

- 1: Eyebrow shape
 4: Combat site
 9: Helps with the heist
 14: ___ culpa
 15: Not intoxicated
 16: Exceeding
 17: 'No ____, ands, or buts!'
 18: Peasant shoe
 19: Was a snoop
 20: Street urchin
 23: Put up preserves
 24: Curved moldings
 25: Daylight
 26: Employ
 27: Withered
 28: Outshines
 31: Lions and Tigers and Bears

Down

- 1: Pals
 2: Retreat
 3: Small wheel
 4: Dunderheads
 5: Niagara Falls sound
 6: Reduces in intensity
 7: Lighted sign contents
 8: Van Gogh or Picasso
 9: Colorado ski resort
 10: Prickly casing
 11: Connoisseurs
 12: Benedict Arnold's crime
 13: Gloomy state
 21: Player's peg
 22: Boil fluid
 28: Constricting snake
 29: Man in a lodge

- 32: Gondolier gear
- 33: Hammer parts
- 34: Prohibition-era fixtures
- 38: Get going
- 40: City map
- 41: Raise, as an anchor
- 42: Stationed
- 44: Spot and Fido
- 48: In the manner of
- 49: Pouch in the body
- 50: Coconut product
- 51: Turn tail
- 52: Embodiment
- 56: Kind of code or colony
- 58: Airwaves
- 59: Bossy's chew
- 60: Represent onstage
- 61: Lieu
- 62: Musclebound brute
- 63: They're often out on a limb
- 64: Center-to-quarterback transitions
- 65: Ran in front
- 30: Barely flows
- 31: Capital of Phoenix?
- 32: Furry friend
- 33: Set as rivals
- 34: Much of Cuba
- 35: Start to mature?
- 36: Tap output
- 37: In mourning
- 38: Put a fresh point on
- 39: Gasoline additive
- 42: Prohibition
- 43: Portal
- 44: Stewing vessel
- 45: Grand in scope
- 46: Touring theatrical company
- 47: Smoothed wood
- 49: Delta deposits
- 50: Funny fellows
- 53: FYI cousin
- 54: Flightless bird
- 55: Tide type
- 57: It may be passed on the Hill

Solutions

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 8 | 3 | 5 | 4 | 7 | 1 | 6 | 9 | 2 |
| 2 | 4 | 9 | 5 | 8 | 6 | 3 | 7 | 1 |
| 7 | 6 | 1 | 2 | 9 | 3 | 4 | 5 | 8 |
| 4 | 5 | 6 | 9 | 2 | 8 | 1 | 3 | 7 |
| 1 | 8 | 2 | 3 | 4 | 7 | 5 | 6 | 9 |
| 9 | 7 | 3 | 6 | 1 | 5 | 8 | 2 | 4 |
| 5 | 1 | 8 | 7 | 3 | 9 | 2 | 4 | 6 |
| 3 | 9 | 4 | 8 | 6 | 2 | 7 | 1 | 5 |
| 6 | 2 | 7 | 1 | 5 | 4 | 9 | 8 | 3 |

Solution (Reversed)

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | T | E | B | A | | A | N | E | R | A | | C | R | A | |
| A | R | P | U | S | | R | E | B | O | S | | A | E | M | |
| D | E | I | R | P | | T | O | B | A | S | | S | F | I | |
| N | A | C | | E | P | I | N | S | R | E | T | T | U | G | |
| E | S | U | | N | U | S | | | | | S | E | E | G | O |
| S | O | R | P | | S | T | S | E | B | | E | R | E | S | |
| S | N | E | E | P | | | E | L | O | P | | | | | |
| | | S | E | I | S | A | E | K | A | E | P | S | | | |
| | | | | T | A | L | P | | | T | R | A | T | S | |
| S | T | E | P | | D | E | S | A | B | | E | V | O | H | |
| A | R | P | O | C | | | | C | A | S | | A | L | A | |
| N | O | I | T | A | N | R | A | C | N | I | | N | U | R | |
| D | U | C | | R | E | H | T | E | | L | A | N | E | P | |
| E | P | A | | D | A | E | T | S | | T | C | A | N | E | |
| D | E | L | | S | P | A | N | S | | S | T | S | E | N | |