



ETHICAL AGENTS LTD
VETERINARY MARKETING

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Special points of interest:

- * Explaining how wound contraction works
- * The most popular medicine ever invented
- * Another potential GnRH usage
- * A look at new Zealand's divisive racing scene
- * Funnies!

D cloprostenol

While *d* cloprostenol, as the pure form, is more potent than the racemic mixture of *dl* cloprostenol the difference is more than a simple 1:1 comparison that one would expect from a racemic mix, i.e. *dl* cloprostenol is a mixture of one part *l* cloprostenol, which does not trigger reproductive receptors, with one part of *d* cloprostenol, which does. Thus one would expect *d* cloprostenol to be twice as potent as the racemic *dl* cloprostenol.

In fact research has shown that it is even more potent than that, the potency of *d* cloprostenol being 3.3 times that of *dl* cloprostenol.

It has been postulated that the mechanism for this phenomenon is may be a different binding capacity to PGF_{2α} receptors of the *d* isomer compared with the racemic mixture.

Work by Re *et al* showed that cloprostenol binds to PGF_{2α} receptors stereospecifically, in as much as *d* cloprostenol shows an affinity for PGF_{2α} re-

ceptor similar to the natural ligand PGF_{2α}, whereas the racemic mixture displayed a considerably lower affinity for the same receptors.

The clinical relevance of this is that, not only is *d* cloprostenol specific for the uterine and ovarian receptors, it is more than the expected twice as potent, closer to four time as potent, than the racemic *dl* cloprostenol mixture. Thus much lower doses of pure more specific prostaglandin can be used making undesired side effects a thing of the past.

In addition, from an OSH point of view, prostaglandins are incredibly lipophilic making them very rapidly absorbed via the skin. The side effects in some people, especially asthmatics, can be alarming and great care must be taken with their use.

The *d* cloprostenol isomer not only has this greater affinity for the uterine receptors, resulting in a much lower dose of prostaglandin being used, it also is specific for



those receptors, i.e. it does not have the other effects

in the body, hence is much safer for staff to use, always with the proviso of course that extreme care must be taken by women of child bearing age due to the reproductive effects.

References:

- 1) Re, Badino, Novelli, Vallisneri and Girardi; Specific binding of *dl* cloprostenol and *d* cloprostenol to PGF_{2α} receptors in bovine corpus luteum and myometrial cell membranes. *Journal of veterinary Pharmacological Therapy*, 17, 455-458, 1994.
- 2) Kral J, Bilek P, Mysickova S, Borovicka A, Pichova D and Sevcik B; The effect of optically active cloprostenol isomers on the secretory activity of the yellow corpuscle. *Biological and Chemical Veterinary*, 24, 217-222, 1998.

Editor's Note

It was necessary to put a scientific article on the front page—in order to fit the all important funnies in inside!

Wound Contraction

Injury that disrupts an epithelial layer instantaneously generates endogenous electric fields, which were detected at human skin wounds over 150 years ago. Emil du Bois-Reymond (November 7, 1818 – December 26, 1896) was a German physician and physiologist, the discoverer of nerve action potential, and the father of experimental electrophysiology. He developed the view that a living tissue, such as muscle, might be regarded as composed of a number of "electric molecules", of molecules having certain electric properties, and that the electric behaviour of the muscle as a whole in varying circumstances was the outcome of the behaviour of these native electric molecules. We now know that these are the sodium, potassium and other ions, which are responsible for electric membrane phenomena in excitable cells.

Since the 80's researchers have recognized the biochemical reactions that provoke migration of cells in the phenomenon of wound contraction. However the initial signal, to set off the process continued to escape them. What forces the cells to be guided towards the wound?

Recent research, led by Professor Min Zhao at Glasgow University, combining molecular, genetic and imaging techniques have provided significant insights into cellular and molecular responses to this "unconventional" signal. One unexpected finding is that the electric

fields play an overriding guidance role in directing cell migration in epithelial wound healing.

Min Zhao demonstrated that the current is not only generated by the damaged cells in the wound but it also indicates the direction repairing cells follow. In addition the researchers could accelerate or delay healing by modifying the intensity of the current.

The skin acts a little like a battery, when intact the cells have positive and negative ions passing across their membranes, provoking an electric potential. When the skin is damaged the wound initiates a sort of short-circuit that sets off an electric current in a defined direction.

When researchers applied, with the aid of electrodes, a current in the opposite direction the result was stunning; the wound not only ceased closing, it opened up. Also they found that the speed of closure was at its fastest with a current between 100 and 200 millivolts per millimetre.

Some chemicals, such as silver nitrate, when applied to the skin increase the pressure of the electric field while other such as furosemide inhibit the ionic flux, reducing the electric field of the wound and so compromising healing.

Since the 70's it has been known that cells form a framework, known as a cytoskeleton, which can shift and allow displacement. Without this cytoskeleton immune

cells such as leukocytes, would not be able to reach the different infected zones in the body.

It is actin and myosin, proteins comparable to those in the muscles, which give the cells their mobility.

To prove that the contraction of the cytoskeleton is initiated under the

Some chemicals, such as silver nitrate, when applied to the skin increase the pressure of the electric field

influence of an electric current Min Zhao looked at two proteins, PI3Ky and PTEN, known respectively to be the accelerator and the brake on movements of the cytoskeleton. PI3Ky primes a chemical chain reaction that concludes in contraction of actin and myosin. On the other hand PTEN limits the level of PI3Ky slowing the process.

Genetically modified mice, without PI3Ky in their cells, served as guinea pigs. Although prompted by an electric current their skin did not heal. However skin consisting of cells without PTEN healed 30% more rapidly than normal skin.

This is seen as a link between the biochemical process and the physical effect if the electric current.

The aim now is to develop substances that stimulate a local exchange of ions in order to increase the electric current and accelerate healing.

Reincarnation

I was explaining to my wife last night that when you die you get reincarnated but must come back as a different creature.

She said she would like to come back as a cow.

I said you're obviously not listening.



The Largest Selling Medicine

One of the bigger celebrations this year was the 125th birthday celebration in Atlanta, Georgia, USA for a medicine that turned into, without doubt, the most marketed product in World history.

Based on herbs from Peru the original formulation had three major ingredients, one of which, carbonated water, was actually introduced in error in the initial mix but became part of the outstanding success of the product.

The original medicine was first produced in 1886 by US pharmacist John Pemberton, a former Confederate soldier in the American Civil War.

In April 1865, Pemberton was wounded in the Battle of Columbus, Georgia, and like many wounded veterans, he became addicted to morphine. Searching for a cure for this addiction, he began experimenting eventually creating his own version of Vin Mariani, containing kola nut and damiana, which he called Pemberton's French Wine Coca.

With public concern about drug addiction, depression and alcoholism among veterans, and "neurasthenia" among "highly-strung" Southern women, his medicinal concoction was advertised as being particularly beneficial for "ladies, and all those whose sedentary employment causes nervous prostration, irregularities of the stomach, bowels and kidneys, who require a nerve tonic and a pure,

carbonated water, was actually introduced in error in the initial mix

delightful diffusible stimulant."

In 1886, when Atlanta and Fulton County enacted temperance legislation, Pemberton found himself

forced to produce a non-alcoholic alternative to his French Wine Coca.

The first sales were at Jacob's Pharmacy in Atlanta, Georgia, on May 8, 1886. It was initially sold as a patent medicine for five cents a glass at soda fountains, which were popular in the United States at the time due to the belief that carbonated water was good for the health.

Marketed as Coca Cola Pemberton was bought out by a rather hard-headed businessman and the aggressive marketing began.

The secret formulation, the distinctive bottle, the famous cursive script logo the linking of the red and white colours with Santa Claus images and the initial hint of cocaine all added to the mythology of Coca Cola, which came to represent capitalism in the extreme.

Two World Wars added to the fame as Coca Cola was drunk worldwide by American GI's, being known as the drink of the victors in post war Japan. In Europe drinking Coca

Cola was considered as drinking the American dream; all of this added to the mythology so that now more than a billion bottles are drunk worldwide every day.

One of the massive achievements of Coca Cola was that the initial flavour has never been successfully copied. In fact Coca Cola itself tried to alter it and market New Coke in 1985 but this was never as well accepted as the original and discontinued in 2002.

This of course is a stunning parallel with another product marketed in red and white colours also and, despite numerous attempts by competitors, has never been successfully copied. Although the world dairy cow hypocalcaemia market is tiny in comparison to the massive worldwide market for drinks Calol stands just as supreme in that market as Coca Cola does in the latter in that it is easily the market leader, thanks to a special formulation and neither has been successfully copied by competitors.



Stay

I pulled into the local supermarket car park and rolled down the car windows to make sure my Lab Retriever Pup had fresh air. She was stretched out on the back seat and

I wanted to impress upon her that she must remain there.

I walked to the kerb backward, pointing my finger at the car and saying emphatically, 'Now you

stay. Do you hear me?' 'Stay! Stay!'

The driver of a nearby car, a pretty blonde young lady, gave me a strange look and said, "Why don't you just put the handbrake on?"

GnRH Post Insemination

It is now standard practice in this country for non-cycling cows to all be treated, if they do not have any uterine infection, with a planned breeding programme, i.e. GnRH injection plus progesterone insertion, withdrawal of progesterone with prostaglandin injection, another GnRH injection and finally fixed time insemination. This pharmaceutical protocol takes away the need for diagnosis and so rectal palpation of ovaries is becoming a technique of the past, in much the same manner as when the advent of prostaglandins once made uterine irrigations to provoke oestrus redundant.

The benefits, both efficaciously and economically, are well accepted but, as with all protocols, there is always a search to be more efficient. In particular research has been looking at one of the major causes of reproductive infertility in herds, early embryonic loss. CIDR inserts from five to twelve days after insemination, to increase progesterone levels, had no effect on pregnancies per insemination and so focus switched to GnRH therapy post insemination.

Initial work focused on GnRH injections at insemination and then at five days post insemination with the idea being that GnRH may reduce early embryonic mortality by enhancing lutealisation of thecal and granulosa cells through the increased LH surge. The subsequent increase in progesterone secretions may improve maternal recognition of the conceptus (BonDurant *et al* 1991). However this again proved unsatisfactory with little effect on the number of pregnancies per insemination.

In contrast GnRH at a later date, 12-14 days post insemination has been shown to be more beneficial with some promising work done.

The Theory: Approximately 20 to 30% of all embryos die within the first 30 days of gestation. There are several reasons why the embryo may die. One important cause is failure of the embryo to initiate maternal recognition of pregnancy.

At the end of the oestrus cycle, the CL produces the hormone oxytocin, which then stimulates the uterus to produce PGF_{2α}, and uterine PGF_{2α} in turn, stimulates the CL to produce more oxytocin. This "positive feedback" between luteal oxytocin and uterine PGF_{2α} ultimately causes the regression of the CL.

Early pregnancy is maintained in ruminants through the actions of conceptus-derived interferon (IFN)-tau on the endometrium. IFN-tau alters uterine release of PGF_{2α}, which results in rescue of the corpus luteum and continued release of progesterone. The mechanism of action of IFN-tau includes inhibition of oestradiol receptors, consequent reduction in oxytocin receptors, activation of a cyclooxygenase inhibitor, and a shift in the PGs to favour PGE₂ over PGF_{2α}.

The embryo must produce sufficient quantities of interferon tau by about day 16 to prevent luteolysis. Its ability to achieve this is largely dependent on the pattern of maternal progesterone production. A late rise in progesterone after ovulation or poor progesterone secretion during the luteal phase results in the development of poor embryos capable of producing little or no interferon tau at the critical time.

It has been suggested that the embryo fails to release sufficient interferon-tau or that the signal is too late.

Injections of IFN-tau could possibly block the release of uterine

PGF_{2α} and extend the life of the corpus luteum but exogenous IFN-tau increases uterine body temperature, which results in embryo mortality (Thatcher *et al.*, 1994; Niswender *et al.*, 1997). Therefore different methods must be used to block the release of PGF_{2α}.

The embryo must produce sufficient quantities of interferon tau by about day 16 to prevent luteolysis.

GnRH 12-14 days after breeding leads to follicular waves inhibition and luteinization of new follicles. This in turn results in more progesterone and in oestradiol reduction.

Oestradiol reduction results in no endometrial oxytocin receptor formation thus there is no PGF_{2α} release. More progesterone provides more time for the embryo to produce bovine trophoblast IFN-tau.

There is enough work to show the technique has benefits (Dodamani *et al.*,) the question being whether the cost benefits are as good or better than the proven regime already used in New Zealand.

It may certainly be worth a try with farmers who query the cost of the full programme.

References:

- 1) BonDurant R.H., Revah I., Franti C., Harman R.J., Hird D., Klingborg D., McCloskey M., Weaver L. & Wilgenberg B. (1991) Effect of gonadotropin-releasing hormone on fertility in repeat-breeder Cali-

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GnRH Post Insemination

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- 1) California dairy cows. Theriogenology 35: 365-374.
- 2) Dodamani M, Mohteshamuddin K, Awati S, Tandle M and Honnappa-gol S. Evaluation of Pre and Post Artificial Insemination effect of GnRH Hormone on conception of repeat breeder Deoni Cows. Veterinary World Vol.3(5): 209-211
- 3) Hansen TR, Austin KJ, Perry DJ, Pru JK, Teixeira MG, Johnson GA. Department of Animal Science, University of Wyoming, Laramie 82071, USA Mechanism of action of interferon-tau in the uterus during early pregnancy. J Reprod Fertil Suppl. 1999;54:329-39
- 4) Macmillan K.L., Taufa V.K. & Day A.M. (1986) Effects of an agonist of gonadotrophin releasing hormone (Buserelin) in cattle. III. Pregnancy rates after a post-insemination injection during me-

toestrus or dioestrus. Animal Reproduction Science 11: 1-10.

- 5) Mann GE, Lamming GE, Robinson RS, Wathes DC The regulation of interferon-tau production and uterine hormone receptors during early pregnancy. J Reprod Fertil Suppl. 1999;54:317-28.
- 6) Niswender G, Juengel J, Silva P, Rollyson K, and Mcintosh E. Mechanisms Controlling the Function and Life Span of the Corpus Luteum. Physiological Reviews Vol. 80, No. 1, January 2000
- 7) Niswender K.D., Li J., Powell M. R., Loos K.R., Roberts R.M., Keisler D.H., and Smith M.F. Effect of variants of interferon-tau with mutations near the carboxyl terminus on luteal life span in sheep. Biology Of Reproduction 56, 214-220 (1997)
- 8) Sartori R., Baruselli P.S., Souza A. H., Cunha A.P. and Wiltbank M.C.

Recent advances in ovulation synchronization and superovulation in dairy cattle. II International Symposium on Animal Biology of Reproduction, Nov. 19-22, 2008, São Paulo, SP, Brazil.

- 9) Sterry R. A., Welle M. L., and Fricke P. M. Treatment with Gonadotropin-Releasing Hormone After First Timed Artificial Insemination Improves Fertility in Noncycling Lactating Dairy Cows. J. Dairy Sci. 89:4237-4245
- 10) Thatcher W.W., Drost M., Savio J.D., Macmillan K.L., Entwistle K.W., Schmitt E.J., de la Sota R.L. & Morris G.R. (1993) New clinical uses of GnRH and its analogues in cattle. Animal Reproduction Science 33: 27-49.

Good Ol' Boys

Two good ol' boys in a Kentucky trailer park were sitting around talking one afternoon over a cold beer after getting off of work at their local Toyota plant.

After a while the 1st guy says to the 2nd, "If I was to sneak over to your trailer Saturday & make love to your wife while you was off huntin' and she got pregnant and

had a baby, would that make us kin?

"The 2nd guy crooked his head sideways for a minute, scratched his head, squinted his eyes thinking real hard about the question.

Finally he says, "Well, I don't know about kin, but it would make us even.



The Flagpole

Nagy and Tony were standing at the base of a flagpole, looking up. A blonde walks by and asked them what they were doing.

Tony replied, 'We're supposed to be finding the height of this flagpole, but we don't have a ladder.'

The blonde took out an adjustable spanner from her bag, loosened a few bolts and laid the flagpole down.

She got a tape measure out of her pocket, took a few measurements, and announced that it was 18 feet 6 inches.

Then, she walked off.

Nagy said to Tony, 'Isn't that just like a blonde! We need the height, and she gives us the bloody length!!'



Section 16

Section 16 of the Racing Act often causes much angst and debate with many totally unaware of its original *raison d'être*. Some years ago the Racing Authority, as it was at the time, endeavoured to maximise betting revenue by importing Australian racing as product for Trackside. To do this crowded a lot of airspace and did not leave enough time for punters to assess form, this reducing the whole Trackside presentation performance. (How ahead of their time they were, as the current Board's philosophy of cramming in as much as possible is clearly having negative effects).

To offset this Harness Racing and Greyhounds were asked to forego many prime Saturday dates with the carrot being that revenue from the imported races would be split per code on a basis of total turnover, not just on which particular code had been imported. Harness Racing and Greyhounds agreed to this proposal, making a huge local concession, as it was in the greater good. Thus section 16 was enshrined in the Racing Act.

Times certainly change when the going gets tough. In the last few years the whole racing industry has been going downhill at breakneck speed. Certain sectors of the thoroughbred sport are now lashing out at Section 16 of the Racing Act as being unfair and the cause of all racing's ills. In response to some of the more selfish sectors, who are asserting that South Island thoroughbred racing is being propped up at the expense of the north, NZTR uses the excuse that South Island thoroughbred racing only has 19 Saturdays per year on which to race, thus they are being deprived for the sake of the North.

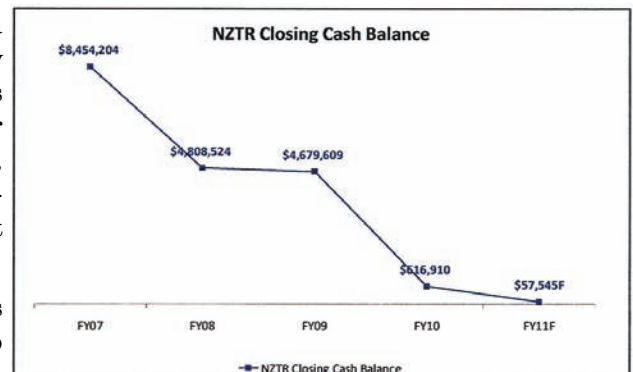
Similarly harness racing, in particular thanks to the 'gentleman's

agreement', has a paucity of Saturday daytime dates, thus not having a fair share of the local pie, and section 16 is designed to counteract this inequity.

In any instance it is rather naïve to blame the ills of the industry on Section 16. The performance of both horse codes, and the thoroughbred code in particular, has been nothing short of woeful when one looks at the balance sheets and blaming Section 16 is blundering around in the dark, missing the real issues.

NZTR cash assets have plummeted from \$8,454,204 in 2007 to a forecast \$57,454 in 2011. While it is facile to blame the recession, and politic to focus on section 16 the root cause of the problem is the ill-advised use of cash reserves to prop up high performance stakes in the face of falling revenue from wagering. Total domestic and imported wagering peaked at \$1,366.4 million in 2007/08 and will drop to a forecast \$1,299 million this racing season this despite NZRB domestic and imported racing coverage increasing dramatically from 30,552 in 2007/08 to a forecast 49,359 this season. Does anyone still seriously believe more is better?

The same people who clamoured for increased stakes, owners, trainers and breeders, are those who now lurch about firing shots at Section 16 and also proposing the One Racing concept, which to other codes is like turkeys voting for Christmas. An interesting insight for Harness Racing into how this would work was across the ditch in Queensland whereby, upon merging the codes the premier harness



track in the State, Albion Park, was promptly sold off and original Harness Racing assets were incorporated into thoroughbred development in the main.

The push to pay stakes beyond the means of the code was not only ill advised; it has potentially damaged the industry beyond repair. The analogy would be MacDonald's increasing ingredient quality, having a more expensive product, rather than focusing on advertising. The MacDonald's franchise is the country's leading advertising spender, spending 4% of total sales revenue on advertising and marketing. Imagine the publicity that would have been gained if the racing industry had spent 4% of sales revenue on advertising instead of throwing away 99.32% of total cash assets on propping up stakes.

Is it too late, with the catastrophic cascade of assets for the racing industry to reverse course on this stakes debacle and have a more responsible spend on professional marketing?

If something dramatic does not happen soon there are a large number of clubs in both equine codes that simply will not be in existence in 2-3 years time. This would certainly destroy the club-based system of governance and makes one wonder whether or not this is a hidden agenda of the Rac-

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Section 16

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ing Board. One would assume there is such agenda along these lines, as the industry simply cannot afford to lose the myriad of unpaid volunteers at club level who keep the game alive.

The best-case scenario, if that happened, would be a concentration of racing in the four major centres, with attendant track surface problems. The industry would die off in the rural areas and once it is lost to a community it would be nigh on impossible for it to win that community back. Racing would become even more enmeshed as an elitist sport in a similar vein to America's cup yachting and we have certainly seen how that sport has prostituted itself in the extreme in a vain bid to regenerate interest in the general populace.

There is no-one, for example, in the harness industry, that does not wish to see the thoroughbred industry thrive and grow.

So where too now for the disparate groups that make up racing? First of all the infighting must stop. The major reason successive governments have paid only lip service to

the racing industry is that the messages received are mixed and so ignored. The respective groups should see themselves as complementary and not as competition.

There is no-one, for example, in the harness industry, that does not wish to see the thoroughbred industry thrive and grow. However it certainly appears that the converse is not the case.

The thoroughbred industry gives the appearance of even being divided within itself, if comments on South Island racing are taken at face value.

Whilst the Racing Board has produced figures that the racing codes rank between the wine and fish industries in terms of size, (exports, employment etc.) the industry itself does not present the unified front that the others do.

The EI outbreak in Australia showed massive divisions in all the equine pursuits, with the thoroughbred code trying to ride roughshod over the wishes of the others, despite pleasure horses of various kinds having massively more numbers.

Even the perception that the thoroughbreds are somehow worth

more than other breeds ignores the fact the largest price paid for a New Zealand horse was the \$10,000,000 for Katie McVean's showjumper Dunstan Delphi.

Although elitism is a traditional trait with many 'horsy' people it is, nevertheless, a fault and something that neither the equine population in general nor the racing codes in particular should take the luxury of indulging in.

Instead of lurching about attacking Section 16 of the Racing Act or inventing the oxymoron of One Racing the thoroughbred industry would do better by working in with the complementary codes to have a united lobby to the government and to co-promote the industry to the general public.

What better way to start than by fixating on the incredible success of the two season stars, James McDonald, champion jockey, and Dexter Dunne, champion reinsman. Both are at the early stages of their careers and are already breaking all records. What a tremendous opportunity they present for synergistic marketing. However it looks like both will be lost to overseas opportunities before that ever happens.

Tough Biker

A tough looking group of bikers were riding when they saw a girl about to jump off a bridge so they stopped.

The leader, a big burly man, gets off his bike and says, "What are you doing?"

"I'm going to commit a suicide," she says.

While he did not want to appear insensitive, he didn't want to miss

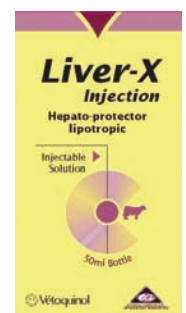
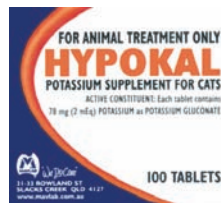
an opportunity he asked, "Well, before you jump, why don't you give me a kiss?"

So, she does and it was a long, deep lingering kiss.

After she's finished, the biker says, "Wow! That was the best kiss I have ever had. That's a real talent you are wasting. You could be famous. Why are you committing suicide?"

"My parents don't like me dressing up like a girl."





Drafting Men Over 60

You can't be older than 42 to join the military. They've got the whole thing ass-backwards. Instead of sending 18-year olds off to fight, they ought to take us old guys. You shouldn't be able to join a military unit until you're at least 35.

For starters: Researchers say 18-year-olds think about sex every 10 seconds. Old guys only think about sex a couple of times a day, leaving us more than 28,000 additional seconds per day to concentrate on the enemy.

Young guys haven't lived long enough to be cranky, and a cranky soldier is a dangerous soldier. "My back hurts! I can't sleep, I'm tired and hungry." We are impatient and maybe letting us kill some asshole that desperately deserves it, will make us feel better and shut us up for a while.

An 18-year-old doesn't even like to get up before 10 a.m. Old guys always get up early to pee so what

the hell. Like I said, 'I'm tired and can't sleep and since I'm already up, I may as well be up killing some fanatical son-of-a-bitch.

If captured we couldn't spill the beans because we'd forget where we put them. In fact, name, rank, and serial number would be a real brainteaser.

Boot camp would be easier for old guys. As most of us are married, we're used to getting screamed and yelled at, and we're used to soft food. We've also developed an appreciation for guns. We've been using them for years as an excuse to get out of the house, away from the screaming and yelling.

They could lighten up on the obstacle course however. In combat you don't see a single 20-foot wall with rope hanging over the side, nor did soldiers ever do any push ups after completing basic training.

Actually, the running part is kind of a waste of energy, too. Nobody

has ever outrun a bullet. An 18-year-old has the whole world ahead of him. He's still learning to shave, to start up a conversation with a pretty girl. He still hasn't figured out that a baseball cap has a brim to shade his eyes, not the back of his head.

These are all great reasons to keep our kids at home to learn a little more about life before sending them off into harm's way. Let us old guys track down those dirty rotten coward terrorists. The last thing an enemy would want to see is a couple of million pissed off old farts with attitudes and automatic weapons who know that their best years are already behind them.

How about recruiting women over 50 ...in menopause! You think men have attitudes! Ohhhhhh my goodness, you ain't see nothing yet! If nothing else, put them on border patrol.... They'll have it secured the first night!