Q. 1 All versions 8/6/18

03= 04 Cardiovascular Disease — delete "heart disease" collapsed w/ 03

05 Arteriosclerosis

06 Myocardial Infarction

07 Strokes

16 Infectious Disease

17 Viral Infections

11/13 Alzheimers + Dementia — add "dementia) + collapse

10 Mental Disease

12 Depression

14 Schizophrenia

21 immunological disease should read "auto-immune disease"

24 genetically engineered diseases - delete from table

2
9-130)
1-132)

Number 1 problem in developing countries in year 2000?

01- Infectious disease
02- Parasitic disease
03- Malaria
04- Aids
05- Filariasis
06- Hepatitis
07- Malnutrition
08- Food supply: feeding the hungry
09- Sanitation problems
10- Population growth/control
11- Cardiovascular problems
12- Cancer
13- Aging/age related problems
14- DIARRHEA
15- PNEUMONIA
16- HEART DISEASE
17- HYPERTENSION
18- IODINE DEFICIENCY
19- IRON DEFICIENCY
20- INFANT MORTALITY
21- DIABETES
22- HEALTH CARE DELIVERY
23- MENTAL ILLNESS
24- HARD DRUGS
25- VIRAL DISEASES
26- EXPLOITATION BY DRUG COMPANIES
27- ALCOHOLISM

98- Don't Know
99- None

Q.3 (3-134) (5-136) What should be nations #1 priority for medical research between now + end of century?

01- Cancer
02- Molecular / cellular biology
03- Cardiovascular
04- Cardiovascular causes
05- Cardiovascular prevention
06- Cardiovascular treatment
07 Infectious disease
08- Aids
09- Viral diseases
10- Genetic diseases
11- Neuroscience
12- Brain disease
13- Aging / age related problems (n/s)
14- Alzheimers
15- Preventive medicine
16- Basic / fundamental research
17- Mental Illness
18- Heart disease / causes
19- Atherosclerosis
20- Heart disease prevention
21- Heart disease treatment
22- Etiology of disease
23- Identifying population at risk
24- Epidemiology
25 Biomedical research

97- All areas of research are important / none have priority over the other
98- Don't Know / NA
99- None

→

3

26- Endocrinology
27- Immunology
28- Vaccination / vaccine development
29- Anti viral agents
30- Population control
31- Cancer : causes
32. Cancer : cures
33- Cancer : prevention
34- Cancer : treatment
35- Degenerative diseases
36- Diet
37- Researcher autonomy / freedom
38- Lifestyle-related problems : obesity / smoking / alcohol
39- Increased funding
40- Pain research
41- Prevention of disc degeneration
42- Emphasis on the productive - less on aging / terminally ill
43- Inadequate # of research personnel
44- Availability of health care
45- Transfer of new knowledge into clinical practice / application of advances
46- Artificial contraception / abortion
47- Identifying ineffective treatment
48- Research Emphasis on human societal needs

(4) Other diseases/conditions you think may be eliminated by year 2000?
T-38) (139-40) (141-42)

01-	Measles	(16)	26- KAWASAKI
02-	Aids	(14)	27- MALNUTRITION
03-	Poliomyelitis	(12)	28- VITAMIN DEFICIENCY
04-	Rubella	(6)	29- GOITER
05-	Malaria	(6)	30- SCHISTOSOMIASIS
06-	Hepatitis (GEN)	(6)	31- HEPATITIS A
07-	Chicken pox	(5)	32- HEPATITIS B
08-	Huntingtons	(4)	33- PNEUMONIA
09-	Leukemia	(3)	34- LEAD POISONING
10-	Diptheria	(3)	35- ENVIRONMENTAL HEALTH PROBLEMS
11-	Whooping cough	(3)	36- EMPHYSEMA
12-	CHOLERA	(2)	37- LUNG CANCER
13-	Tuberculosis	(2)	38- PREMATURITY
14-	Mumps	(2)	39- HYALINE MEMBRANE DISEASE
15-	Diabetes	(2)	40- RH ERYTHROBLASTOSIS
16-	Cystic fibrosis	(2)	41- RICKETS
17-	Cardiovascular	(2)	42- YAWS
18-	Infectious disease		43- CANCER/CANCER CELLS
19-	Viral disease		44- IMMUNE DISEASES
20-	HEREDITARY DISEASES		45- DYSENTERY
21-	TYPHOID FEVER		46- INFLUENZA
22-	SCARLET FEVER		47- BREAST CANCER
23-	SICKLE CELL ANEMIA		48- HEPATOCELLULAR CARCINOMA
24-	THALASSEMIA		49- TRYPANOSOMA
25-	HEMOPHILIA		50- RABIES
98-	DON'T KNOW/NO ANSWER		51- HEART DISEASE
99-	None		

Q4

Pg. 20=2

CONT'D.

(137-38) (139-40) (141-42)

52- GAUCHER

53- TAY-SACHS

54- ARTEROSCLEROSIS

55- OSTEOARTHRITIS

56- LOW BACK PAIN

57- MULTIPLE SCLEROSIS

58- ALZHEIMERS

59- ARTHRITIS

60- LEPROSY

61- PSYCHIATRIC DISEASES

62- HODGKINS

63- IATROGENIC BIRTH DEFECTS

64- SCHIZOPHRENIA

65 - CIGARETTE SMOKING

66- DEATH FROM ORGAN DISEASE

67- GALL BLADDAR SURGERY

68- DIARRHEA

69- ROTA

70 - OSTEOPOROSIS

71 - CYSTOMYOSIS

72 - TROPANSTIOMIASIS

73 - HERPES

74 - vitamin A deficiency

) - Medical
BL1018
- VERSIONS Q5

Base: 149

Pg. 1 OF 3

Disease or condition which genetic engineering will have greatest impact by year 2000?
14)(145-46)

01-	Cancer (n/s)	(30)
02-	Diabetes	(16)
03-	Sickle Cell Anemia	(12)
04-	Aids	(8)
05-	Cystic Fibrosis	(7)
06-	Huntingtons	(7)
07-	Thalassemia	(7)
08-	Alzheimers	(5)
09-	Hemophilia	(4)
10-	Hepatitis	(4)
11-	Tay-Sachs	(4)
12-	Malaria	(4)
13-	Growth hormone deficiencies	(4)
14-	Leukemia	(3)
15-	Infectious disease (n/s)	(3)
16-	Genetic diseases (n/s)	(3)
17-	Cardiovascular disease	(3) (2)
18-	Aid in diagnosis	(2)
19-	Genetically engineered bacteria: interferon	
20-	Hypertension	
21-	Malnutrition	(2)
22-	GAUCHER'S DISEASE	
23-	BLOOD ENZYME DEFICIENCY DISEASES	
24-	SEVERE DEPRESSION	
98-	DK/NA	
99-	None	

Q5 CONT'D.

(43-44) (45-46)

25- METABOLIC DISEASES/DISORDERS
26- MUSCULAR DISEASES
27- DWARFISM
28- BRAIN PEPTIDE RESEARCH
29- DEVELOPING NEW FOODS: RESISTANCE TO ADVERSE CONDITIONS
30- PRODUCTION OF INSULIN
31- BONE MARROW TRANSPLANTATION
32- HISTOCOMPATABILITY RESEARCH
33- IMMUNE SYSTEM RESEARCH/DISEASES
34- CANCER CHEMOTHERAPY/NEW AGENTS
35- IDENTIFYING POPULATION AT RISK
36- MENTAL ILLNESS
37- HEMOLYTIC ANEMIAS
38- GENE INSERTION
39- IDENTIFYING SEQUENCES OF PROTEIN
40- DISEASES OF THE ENDOCRINE SYSTEM
41- CLOT DISSOLUTION
42- PRODUCTION OF HORMONES
43- PRODUCTION OF ANTIBIOTICS
44- CELLULAR DIFFERENTIATION CONTROL
45- GENETIC SCREENING
46- VACCINE DEVELOPMENT
47- ALCOHOLISM
48- HEART DISEASE
49- RENAL KIDNEY FAILURE

25 CONT'D.

(143-44) (145-46)

50- CONNECTING PATHOLOGY OF BLOOD FORMING DISEASES

51- VIRAL DISEASES

52- HEPATITIS B

53- BREAST CANCER

54- ENZYME DEFICIENCY DISEASES

55- HEMOGLOBIN DISEASES

56- LESCH-NYHAN SYNDROME

57- MYOCARDIAL INFARCTION

58- DNA RECOMBINATION STUDIES

59- HEMATOLOGIC CANCERS

60- STIMULATION OF BONE FORMATION

61- INFLAMMATORY DISEASES

62- ~~COURSE~~ MANIPULATION OF THE GENOME

63- AGING

64- ARTHRITIS

65- Phenylketonuria

66- Monogenic disorders

67- Produce milk protein

68- Down Syndrome

BIO-MEDICAL

861018 ALL VERSIONS

Q8 BIGGEST FRUSTRATION FOR SCIENTISTS OVER NEXT 14 YEARS?

01 LACK OF ADEQUATE FUNDS/SUPPORT
02 GOVERNMENT/BUREAUCRATIC INTERFERENCE/REGULATIONS (N/S)
03 GETTING APPROVAL FOR EXPERIMENTS
04 REGULATIONS REGARDING ANIMAL RESEARCH/INTERFERENCE WITH ANIMAL RESEARCH
05 DRUG REGULATORY GROUPS/GETTING DRUGS ACCEPTED
06 LACK OF FREEDOM FOR SCIENTISTS/RESEARCHERS
07 REGULATIONS REGARDING STUDIES ON HUMANS
08 UNDERSTANDING MOLECULAR/CELL BIOLOGY
09 UNDERSTANDING BASIC MECHANISM/ETIOLOGIES
10 COMPLEXITY OF CENTRAL NERVOUS SYSTEM FUNCTION
11 IMMUNOLOGY REJECTION/IMMUNE RESPONSE
12 LACK OF ANIMALS FOR RESEARCH
13 NEED NEW ANTIBIOTICS/DRUGS
14 PREVENTION: MOTIVATING PUBLIC TO PREVENT/CHANGE HABITS/STOP SMOKING
15 LACK OF SUPPORT FOR LONG TERM RESEARCH
16 DRUG RESISTANCE
17 INCREASING COLLABORATIVE ASPECTS/DIFFICULTY GETTING COLLABORATION FROM EXPERTS
18 SLOWNESS OF PROGRESS
19 LAG BETWEEN ADVANCES & APPLICATION
20 APPEARANCE OF NEW DISEASE/VIRUS
21 ETIOLOGIES OF MENTAL DISORDERS
22 LACK OF RECOGNITION/INTEREST IN THE FIELD
23 INCREASING CURE RATE
24 LACK OF RESEARCH PERSONNEL
25 COMPLEXITY OF THE PROBLEM
26 QUALITY OF RESEARCHERS
27 RESULTS/DRUGS PROVEN INEFFECTIVE IN HUMAN TRIALS (WHEN EFFECTIVE IN ANIMALS/IN-VITRO)
28 DIFFERENCES BETWEEN NORMAL & CANCER CELL
29 POPULATION'S ACCESS TO TECHNOLOGY/KNOWLEDGE

Q8 CONT'D.

30 NEED TO EMPHASIZE GLOBAL ISSUES

31 UNDERSTANDING ASPECTS OF CHEMOTHERAPY

32 COPING WITH GENETIC VARIATION

33 UNDERSTANDING MECHANICS OF ACUTE CORONARY EVENT

34 BASIC MECHANISM OF ATHEROSCHLEROSIS

35 MECHANISM OF CONTROL OF LIPOPROTEIN SYNTHESIS

36 DIFFICULTY GETTING ACCESS TO BRAIN AUTOPSY MATERIAL

37 UNDERSTANDING HOW BRAIN FUNCTIONS

38 UNDERSTANDING MEMORY PROBLEMS

39 INADEQUATE ACCESS TO APPROPRIATE PATIENT POPULATIONS FOR STUDY

40 LIMITATIONS OF IN-VITRO STUDIES

41 CLOSE TO SOLUTION; SOMEONE ELSE RESOLVES FIRST

42 RESPONSE TO IMPLANTS

43 FINDING W/ EVERY ASSET THERE IS A LIABILITY

44 SUPPRESSION OF SCIENTIFIC DISSENT FROM SCIENTISTS

45 LACK OF COMPLETE KNOWLEDGE OF NUTRIENT METABOLISM

46 COST OF WORKING W/ HUMAN SUBJECTS

47 DIFFICULT ... CLINICAL STUDIES: PATIENTS COOPERATION

48 ORGANIZED REPORTING TO GOVERNMENT IN MEDICAL SCIENCES

49 VARIABLES OF HUMAN BIOLOGY & GENETICS

50 INTRODUCING DNA INTO ORGANISMS

51 MANY QUESTIONS AS TO HOW GENES ARE REGULATED

52 THERAPEUTIC TRIALS ANTICIPATED BEFORE UNDERSTANDING MECHANISM

53 KEEPING UP W/ KNOWLEDGE/ADVANCES

54 UNDERSTANDING THE CONTROL MECHANISM FOR BONE HOMEOSTASIS OR REMODELING

55 FINDING MATERIALS WHICH MIMIC PROPERTIES OF SUBSTANCES THEY ARE INTENDED TO REPLACE

56 IMPROVED FIXATION OF IMPLANTS

57 TRANSITION FROM SIMPLE LINKS TO HIGH LEVEL ORGANIZATION OF CENTRAL NERVOUS SYSTEM

Q8 CONT'D.

58 NEW SURGERIES WHICH INCREASE SUSCEPTIBILITY OF PATIENT TO MICRO ORGANISMS

59 SOCIETAL RESISTANCE TO USE HIGH TECHNOLOGY

60 POPULATION UNRESPONSIVE TO FINDINGS

61 UNDERSTANDING PRECISE ROLE OF DIETARY FACTORS IN DISEASE

62 INABILITY TO REPAIR IRREVERSIBLE CHANGES

63 GROWING INCIDENCE OF CARDIO MYOPATHY

64 SIDE EFFECTS OF DRUGS

65 TO DETERMINE RELEVANT OUTCOME MEASUREMENTS IN INFANT NUTRITION

66 AGE-RELATED PROBLEMS

67 ANTI-GENETIC VIRUSES

68 ABILITY TO THINK CREATIVELY

69- understanding mechanics of tissue + interaction betw. mechanism of regeneration + remodeling

70 developing methodologies to isolate neural systems

71- how animal systems fit into human brain

72 Multiplicity of types of tumors

98 DON'T KNOW/NO ANSWER

Q6b Other area of biotechnology research which is more promising than those mentioned?

Biotechnology

need input

(216-17) (218-19) (220-21)

01 · new methods for protein synthesis

02 · automation of DNA sequencing procedures

03 · transgenic mice - taking human gene + put into mice

04 · preventive medicine

05 · molecular basis of memory + behavior

06 II · cloning of genes (for molecules)

07 · work in yeast - its a enkaryote - can excrete proteins

08 · use of biomolecules in electronic switching mechanisms

09 · safe reproductive pill

10 · development of delivery methods for ~~getting~~ genetic therapeutic proteins into people

11 · selective herbicide engineering - pest resistant plants, salt tolerant, weather tolerant
· genetic engineering " to improve plants, animals

12 · understand on molecular level what is going on in any disease

· forming therapeutic proteins - for 1 a month use - slowly released

13 · learn how CNS works

98 DK/NA
99 III NO

14 RECEPTOR MEDIATED SIGNAL TRANSDUCTION
15 RESEARCH INTO LINKING BEHAVIOR TO GENETICS & THE MOLECULAR LEVEL

Biotechnology

Basic 20

Q7a Fundamental question needs answer in order to achieve breakthrough in biotechnology?
(222-23) (224-25)

01 A Understanding how gene is regulated / Mechanism of gene control (9)

02 Molecular basis of cell function (3)

03 Understanding molecular basis of neuronal patterning (2)

04 Better methods for inserting new genes at spec. sites into genome

05 E Molecular mechanisms of growth + cell differentiation

06 F How genetic sequence determines the 3-D folding / structure

07 Etiology & Pathogenisis of diseases

08 Interrelationship between hormones & the immune system

09 Studies on mechanism of action of natural mediators of immune inflammatory & proliferative response

98 DK/NA

99 NONE

Biotechnology

Q. 10a Biggest advance for organ transplants resulting from bio-engineering by year 2000
(314-15) (316-17)

01 [Understanding / controlling rejection / compatibility (11)
Controlling immune system / response (3)

02 New drugs (1)

03 Identifying genes involved in recognition of self & non-self

04 Bone Marrow-inserting genes into bone barrow & getting them expressed by recipients

05 Development of reagents

06 Computer assisted muscle movements generated by computer

98 DK/NA

99 NONE

Biotechnology

(318-19) (320-21)

Q. 106 Biggest advance (for cancer) resulting from bio-engineering by year 2000?

01 A [~~Molecular etiology~~ (3)
[Understanding molecular etiology ~~mechanism~~ of cell growth (3)
Understanding oncogenes (2)

04 D Detection (2)

02 B B Stimulation of immune system to combat/identify the cancer (2)

03 C new drugs specifically attack oncogenes or their products
~~Anti-cancer~~

05 More selective delivery of drugs - using monoclonal antibody conjugates

06 Improved Treatment

07 Understanding the events in the environment that cause mutations

08 Hybrid Testing

09 Discovery of growth & antigrowth factors in cancer cells

98 DON'T KNOW / NO ANSWER

99 NONE

Biotechnology

Q.10C Biggest advance for heart disease resulting from bio-engineering by year 2000?

(322-23) (324-25)

01 Control of lipid levels in blood (3)

02 Understanding of lipid metabolism (2)

03 Use of TPA / tissue plasminogen activator (2)

04 Understanding mechanisms of atherosclerosis (3)

05 Regulation / Understanding of cholesterol (3)

06 Control / regulation of LDL (low density lipoprotein) (2)

07 Early diagnosis of predisposition

08 Understanding of heart hormones

09 Developing techniques for preventing the occlusion of the coronary blood vessels

10 To reverse atherosclerosis specifically plaque formation

11 Effective control of hypertension

98 DK/NA

99 NONE

BIOTECHNOLOGY

Q18B One Application is most promising

(364-65) (366-67)

01 Manipulation of the host/immune system to prevent rejection
02 Genetic manipulation of the graft either to improve function or prevent rejection
03 Introducing new genes into an organism to replace missing or defective ones

Biotechnology

Q19 A 861018

01 Creation of food/enriched food products can be made by biotechnology concentrates

02 Gene therapy (insertion of genes to treat gene disorders)

03 Development of an effective individualized anticancer treatment for each patient

04 Antisense RNA - away you can turn off the expression of certain genes

05 Treatment of cancer - some of the growth factors and the drugs predicted on them will have major effects against tumors as new chemotherapeutic agents

06 Limb regeneration by understanding differentiation and growth control

07 Regenerating tissues and whole organs

08 Cancer vaccine

09 Correcting inherited diseases by bioengineering i.e. in conjunction with bone marrow transplantation

10 Synthetic chemistry

11 New pharmacology - effects gene regulation

12 If we knew the rules of protein folding we could make specific re-agents and drugs

13 New advances on hormonal requirements of cells from the nervous system. There are many compounds needed by braincells which have not been identified

14 Design and make small molecules that will do the same thing as large, naturally assisting macromolecules such as proteins, enzymes or peptide hormones

15 Early diagnosis and Prevention

Biotechnology

Q19c 8/10/18

01 Synthetic molecules will replace insulin, growth hormone, TPA, urokinase, streptokinase.

02 Antibodies directed against neoplastic cells would revolutionize anticancer therapy

03 Limb regeneration - There are really no therapies for severed limbs

04 Growth inhibitory factors would replace cytotoxic drugs

05 - Treating tumors by identifying the specific gene that was mutated. Then you could turn off the mutant gene. That would replace chemotherapy/radiation therapy

06 Development of an effective individualized anti-cancer treatment will replace all chemotherapy

07 Hemophilia by factor III and diabetes by insulin

08 Cancer vaccine would replace radiation and chemotherapy

09 Regenerating tissues and whole organs will replace transplants

10 Prevention will replace all treatment

11 Thalasemia treated by transfusion will be candidate for gene therapy

Q 6b Other area of research in infectious disease more promised that what I mentioned ?
(216-17)(218-19)(220-21)

01- Understanding of basic mechanisms of immunity
02- Pathogenesis
03- DNA / nucleic acid study
04- Understanding of molecular mechanisms of parasites
05- " " " " of viral diseases
06- Drug delivery systems
07- ROLES OF INFECTIONS IN DISEASES THAT ARE NOT THOUGHT TO BE INFECTIOUS
08 USE OF MONOCLONAL ANTIBODIES AS IMMUN-THERAPUTIC AGENTS
09 IMMUNOLOGIC & CHEMOTHERAPUTIC CONTROL OF FILARIAL DISEASES

98 DK/NA
99 None / no others

Q. 11a Biggest advance in prevention/treatment of MALARIA by -

Infectious Disease

Q. 7a Fundamental question needs answer in order to achieve major breakthrough in treatment of infectious disease?
(222-223)(224-225)

01- Understanding of basic mechanism of immunity
02- Basis of pathogenicity
03- Mechanisms of drug action + resistance
04- Better understanding of viruses
05- Development of preventive measures
06- Understanding biochemistry + evolution of intermediary metabolism
07- Identifying patterns of protein
08- BETTER DRUG TARGETING
09- BETTER DELIVERY METHODS
10- identification of latent viruses + bacterial 'L' forms

98 DK/NA
99 None

98 DON'T KNOW/NO ANSWER
99 NONE

98 DON'T KNOW/NO ANSWER

Infections Disease #861018

Q. 11a Biggest advance in prevention/treatment of MALARIA by year 2000?

(320-321) (322-323)

01- Develop effective/new vaccine
02- Mosquito control
03- Anti-malaria drugs
04 USE OF DDT
05 MALARIAL SANITATION

98 DON'T KNOW/NO ANSWER
99 NONE

Infectious Disease

#861018

Q. 116 Biggest advance in prevention/treatment of common cold by year 2000?

(324-25)(326-27)

01- Interferon
02- Therapeutic drugs; anti-viral/chemotherapy
03- Immunization
04- Better understanding of cold viruses
05 ACHIEVING THE CONTROL OF THE MATRIATION PROCESS OF ENZYMES
06 UNDERSTANDING HOW INTERFERON WORKS

98 DONT KNOW/NO ANSWER
99 No major advance

Infectious Disease

Q14c [357-58] [359-60] [361-62] 861018

01 New antiviral/antifungal drugs will replace existing compounds/therapies
02 Pseudomones will replace B-tartans antibiotics
03 Vaccines will be replaced by prevention
04 Nucleoside analogs now used for Herpes Virus will be replaced by new agents
05 Treatment for measles and hepatitis will be replaced by a vaccine
06 Use of combination therapy using two antibodies
07 Displace the poor compounds we have now
08 Common penicillin will be replaced by new drugs
09 Toxic drugs will be replaced by polynucleotides
10 Antiviral drugs against human immune defenses will be replaced by new agents
11 Antiviral drugs/antibiotics will be replaced by immunization

98 DKINA
99 None

Bio Medical
Infections Diseases

#861018

15 - 1 of 2

Q 18a Diseases in developing countries which should be top research priority (366/67)(368-69)

01- Malaria (16)
02- Schistosomiasis (8)
03- Diarrhea (5)
04- Aids (3)
05- Typhoid (3)
06- Tuberculosis (3)
07- Viral disease (3)
08- Parasitic disease (3)
09- ACUTE RESPIRATORY INFECTIONS
10 - MEASLES
11 - POLIO
98- DK/NA
99 - NONE

(continued) P.2

Q 18b Diseases in U.S. + developed world which should be top research priority (370-71)(372-73)

01- Aids (16)
02- Influenza (4)
03 - Pneumonia (2)
04- Cytomegalovirus (3)
05- Pulmonary disease (n/s) (2)
06 - RESPIRATORY DISEASES
07 - ONCOGENIC VIRUSES
08- VIRAL INFECTIONS
09- PROTOZOAL DISEASES
10 - PULMONARY BRONCHITIS

(continued) P.2

98- DON'T KNOW/NO ANSWER

BIO-MEDICAL

INFECTIOUS DISEASES

#861018

Q18A CONTD.

12- MENINGITIS
13- PNEUMONIA
14- CHOLERA
15- PROTOZOAN DISEASES
16- INFECTIONS THAT AFFECT PREGNANCY
17- MALNUTRITION
18- HEPATITIS
19- RIVER BLINDNESS

98- DON'T KNOW/NO ANSWER
99- NONE

Q18B CONTD.

11- ALBICONS INFECTIONS
12- ALL OF THEM
13- GRAM NEGATIVE BACTERIA INFECTIONS
14- VENEREAL DISEASES
15- SEXUALLY TRANSMITTED DISEASES
16- BACTERIAL INFECTIONS
17- NOSOCOMIAL INFECTIONS

CARDIOVASCULAR - PINK

#861018

Q6B ANY OTHER MAJOR AREA OF CARDIOVASCULAR RESEARCH WHICH IS MORE PROMISING THAN THOSE MENTIONED?
(216-17), (218-19), (220-21)

01- MODIFICATION OF TYPE A BEHAVIOR

02 - ANTI-PLATELET AGENTS SHOULD BE PURSUED / ANTI-PLATELET MECHANISMS

03- RESEARCH ON CARDIOMYOPATHY, UNDERSTANDING THE BASIC MECHANISMS

04- CHANGING PEOPLES HABITS: HEALTHIER DIET, PHYSICAL ACTIVITY, CONTROLLING WEIGHT, MODIFYING SOCIAL/PSYCHOLOGICAL REACTIONS

05 - ARRHYTHMIAS

98- DK/NA

99- NO/NONE

Q. 7a Cardiovascular - Fundamental question which needs to be answered to achieve breakthrough in treatment of central nervous disorders?

(222-223)(224-225)

01 – Molecular mechanism of heart disease (3)
02 - Molecular mechanism of atheroschlerosis (5)

03 – Causes/etiology of heart disease (2)
04 - Causes/etrology of atheroschlerosis (5)

05 - Development of methods to affect lifestyle alterations

06 - Pathogenesis of hypertension

07 - What leads to progression of heart muscle disease

08 - Mechanism of conversion from chronic to acute disease in ischemia

09 - Finding best therapy which makes atherosclerosis disappear

10 - Understanding factors which make individual susceptible

11 - How type A behavior accelerates heart disease

12 - Understanding what controls levels of high density lipoproteins
13 - Relationship between ~~act~~ athrogenesis + thromboogenesis

98 DON'T KNOW/NO ANSWER

99 NONE

Bio Medical

#861018
Base: 18
PG. 1 OF 2

ardiovascular

Q. 11a Biggest advance in prevention & treatment of heart attacks by year 2000?

(316-17)(318-19)

01- Prevention of / reduction of smoking (3)

02- Change in dietary habits (2)

03- Reduction / prevention of atherosclerosis (3)

04- Thrombolytic therapy (4)

05 - REDUCTION OF BLOOD LOW DENSITY LIPO PROTEIN

06 - REDUCTION OF CHOLESTEROL LEVELS

07 - IDENTIFICATION OF SUSCEPTIBLE INDIVIDUALS BY MEANS OF GENETIC MARKERS

08 - DRUGS TO STOP INFARCTION PROCESS

09 - UNDERSTANDING WHAT PRECIPITATES CLOT

10 - NEW AGENTS TO PREVENT PLATELET AGGREGATION PRODUCED USING MONOCLONAL ANTIBODY TECHNIQUE

11 - MODIFICATION OF TYPE A BEHAVIOR

12 - BETTER UNDERSTANDING OF THE MOLECULAR MECHANISMS OF ARTERIOSCLEROSIS

)10 - MEDICAL
ARDIOVASCULAR
Q 11A CONT'D.

(316-17) (318-19)

13- PROGRESS IN CORONARY BYPASS

98- DON'T KNOW/NO ANSWER

99 - NONE

Bio Medical #861018

Cardiovascular

Q.116/C Biggest advance in treatment/prevention of (strokes) (sudden death) by year 2000 ?
(320-21)(322-23)
(324-25)(326-27)

01 -	Treatment of / control of high blood pressure / hypertension	(11)	(1)
02 -	Prevention of atherosclerosis	(6)	(2)
03 -	Dietary / nutritional factor (reduction of cholesterol)	(2)	(1)
04 -	Platelet anti-aggregation agents	(2)	
05 -	Better drugs	(3)	
06 -	Better / the use of anti-arrhythmia drugs		(2)
07 -	Understanding mechanism / etiology	(2)	(1)
08 -	Prevention / reduction of smoking	(1)	(2)
09 -	Ability to diagnose population at risk	-	(5)
10	Automatic defibrilator (i.e. pacemaker - when heart attack)	-	(3)
11	Decrease of blood low density lypo protein		
12	Better thrombolytic drugs		
13	More adequate electrophysiological analysis of arrhythmias		
14	Better understanding of mechanism of vascular occlusion in the brain		
15	Early reperfusion of neural tissues		
16	Detection of carotoid lesions		
17	Increased use of preventative exercise patterns		
18	Modification of Type A behavior		
98 -	DK/NA		
99 -	None / no major advances		

Pre Medical
Cardiovascular

#861018

Q 12 b What changes in lifestyle would do most to reduce incidence/severity of cardiovascular disease?

(337-38)(339-40)(341-42)

01- Reduction of smoking (9)

02- Dietary changes (8)
03- Reduced fat intake (3)

04- Better weight control: less calories/food (6)

05- Control of hypertension (4)

06- Increased exercise/physical activity (6)
07- Modification of Type A behavior
08- Lower cholesterol
09- Less sodium

98 DON'T KNOW/NO ANSWER

99 NONE

Q14A IN THE YEAR 2000, WHAT DO YOU THINK WILL BE THE TWO OR THREE MOST IMPORTANT, COMPLETELY NEW TYPES OF THERAPY FOR CARDIOVASCULAR DISEASES WHICH ARE NOT AVAILABLE NOW?

(354-55)(356-57)(358-59)

01- BETTER/SAFER ANTI-ARRHYTHMIC DRUGS (6)
02- BETTER/NEW DRUGS/AGENTS FOR LOWERING CHOLESTEROL (3)
03- BETTER/NEW DRUGS FOR CONTROLLING HYPERTENSION/BLOOD PRESSURE (3)
04- BETTER/NEW DRUGS TO PREVENT MYOCARDIAL DAMAGE DURING/AFTER MYOCARDIAL INFARCTION (2)
05- IMPROVED THROMBOLYTIC AGENT/ANTI CLOTTING DRUGS (3)
06- AGENTS TO CONTROL/PREVENT ATHEROSCLEROSIS (2)
07- IMPROVED TREATMENT/CONTROL OF REJECTION IN TRANSPLANTS (3)
08- LASER TECHNOLOGY/TECHNIQUES (2)
09- CATHETER BASED TREATMENT/TECHNIQUES (2)
10- DRUG MODIFICATION OF ATHEROMATOUS PLAQUE/DRUGS THAT REDUCE PLAQUES
11- BETTER ANTI-PLATELET DRUGS
12- DRUGS TO PREVENT ARTERIOSCLEROSIS
13- DRUGS THAT ALLOW NUTRIENTS INTO THE HEART MUSCLE
14- USE OF LIPID CONTROL DRUGS
15- GENETIC THERAPIES
16- NEW SURGICAL INTERVENTIONS
17- MODIFICATION OF TYPE A BEHAVIOR
18- BETTER TREATMENT OF HEART FAILURE
19- CHANGES IN LIFESTYLE

98 DON'T KNOW/NO ANSWER
99 NONE

PINKS - 1000's #861018

Q14 C CARDIOVASCULAR - SP. TREAT. THAT WILL BE REPLACED & IF SO BY WHAT

(361-62), (363-64), (365-66)

01- CHOLESTEROL CONTROL WILL BE ACCOMPLISHED AT A METABOLIC LEVEL (THROUGH DRUGS) RATHER THAN A DIETARY LEVEL

02- ANTI ATHEROGENIC DRUGS WILL COMPLETELY REPLACE PRESENT DAY DRUGS

03- LASER THERAPY WOULD REPLACE PROSTHETIC GRAFTS

98 DK/NA

99- NOTHING

io Medical

#861018
Brsc 115

RDiovasculAR

17b/18b What progress will be in our ability to tell who will suffer from a (heart attack)? (stroke)
370-71) (372-73)
375-76) (377-78)

01-	Identification of/knowledge of Genetic markers/DNA markers	(6)	(4)
02-	Identification of risk factors	(4)	(4)
03-	Non invasive testing/techniques	(4)	(3)
04-	Imaging techniques	(3)	(5)
05-	Better study/control of hypertension/blood pressure	-	(3)
06-	Screening population for blood cholesterol levels		
07-	Stress tests		
08-	Better diagnostic techniques		
09-	Detecting plasma lipid moiety		
10-	Understanding lipoproteins		

98 DON'T KNOW/NA

99 NONE

GOLD - MEDICAL IMPLANTS

Q68 IS THERE ANY OTHER MAJOR AREA OF IMPLANT RESEARCH WHICH IS MORE PROMISING THAN THOSE MENTIONED?

(216-17) (218-19) (220-21)

01 ORTHOPEDIC IMPLANTS/REPLACEMENT (4)
(JOINT REPLACEMENT, SPINAL REPLACEMENT)

02 MUSCULAR-SKELETAL IMPLANTS (2)

03 MUSCULAR ALLO-GRAFTS (1)

04 PANCREAS ALLOGRAFTS (1)

05 THYROID PARATHYROID ALLOGRAFTS (1)

06 ENDOCRINE IMPLANTS (1)

07 OSTEOCHONDROSKELETAL TISSUE (1)

08 IMPLANTABLE DEFIBRILLATORS (1)

09 IMPLANTABLE INFUSION PUMP (1)

10 PROSTHETIC DEVICES (1)

11 ELECTRICAL TREATMENT OF OSTEOPOROSIS OF THE SPINE (1)

12 ELECTRICAL TREATMENT OF OSTEOARTHRITIS

13 BIOLOGICAL FIXATION - OSTEO INDUCTIVE METHODS

14 BIO ARTIFICIAL ORGANS

15 REPLACEMENT OF SOFT TISSUE IN MUSCULARSKELETAL SYSTEM

16 HYBRID ARTIFICIAL ORGANS

17 IMPLANTING A MATERIAL THAT BEGINS AS A MECHANICAL DEVICE BUT THROUGH BIODEGRADATION & REPLACEMENT ENDS AS A BIOLOGICAL DEVICE

18 FETAL GRAFTING OF TISSUE FOR LIGAMENT/CARTILAGE DEFECT REPLACEMENT

98 DON'T KNOW/NO ANSWER

99 NO/NONE (7)

GOLD - MEDICAL IMPLANTS

Q12 IN WHAT ONE AREA DO YOU SEE IMPLANTS AS PLAYING THE GREATEST ROLE IN THE YEAR 2000?

(316-17) (318-19)

01 CARDIOVASCULAR (6)
(HEART VALVE IMPLANTS, ARTIFICIAL HEART REPLACEMENTS)

02 ORTHOPEDICS (16)
(ORTHOPEDIC IMPLANTS, HIP IMPLANTS, KNEES, JOINT REPLACEMENTS/ IMPLANTS/RECONSTRUCTION, ARTHRITIS, SPINE)

03 MUSCULARSKELETAL (re-read: stim. dead muscles - ms.) (3)

04 (2)

05 IMPLANTABLE DRUG DELIVERY PUMPS (1)

06 (1)

07 HEARING AIDS (1)

08

09 PS PREVENTION OF SUDDEN DEATH

10 MECHANICAL REPLACEMENT FOR DAMAGED ORGANS ~~&~~ things that have electrical interactions w/ tissue & implant

98 DON'T KNOW/NO ANSWER

99 NONE

GOLD - MEDICAL IMPLANTS #861018

Q14. CAN YOU THINK OF A SPECIFIC INSTANCE WHERE ANIMATE IMPLANTS ARE LIKELY TO HAVE REPLACED IMPLANTS?

(321-22) (323-24)

01 JOINTS (9)
(JOINT TRANSPLANTS/REPLACEMENT/RESURFACING/ALLOGRAFTS, HIPS, ALLOGRAFT OF THE KNEE)

02 BONES/SEGMENTS OF BONE (4)
(BONE TRANSPLANTS/REPLACEMENT, SEGMENTS OF BONE/SKELETON)

03 HEART (4)
(ARTIFICIAL HEARTS/VALVES, HEART IMPLANTS)

04 SKIN (1)

05 LUNGS (1)

06 LIVER (1)

07 PANCREAS (1)

08 KIDNEY (1)

09 LIGAMENTS (1)

10 CONNECTIVE TISSUE (1)

11 INSULIN SECRETING TISSUE (1)

98 DK/NA

99 NONE

CNS

Q. 6b Other areas of CNS research which is more promising than those mentioned (216-17), (218-19) (220-21)

01 Alzheimers (2)
02 Understanding multiple sclerosis (2)
03 Biological rhythms both in clinical & basic research
04 NEW PSYCHOTHERAPIES
05 NEW BEHAVIORAL TREATMENTS
06 Treatments for memory disorders
07 Understanding the plastic mechanisms of the brain
08 Drugs for memory
09 Drugs for learning
10 Development in infancy & adolescence
11 Understanding embryological, fetal & neonatal development of the CNS
12 Understanding virally triggered disorders
13 Stabalizing systems of the brain
14 Genetics of depression
15 Understanding addictive disorders
16 Neural death as a part of the pathology of schizophrenia & depression

98 Don't Know/No Answer
99 No/None

Central Nervous System

(222-23) (224-25)

Q. 7a Fundamental question needs answer to order to achieve breakthrough

01- A Understanding molecular/cellular biology of CNS (5)

02- D Understanding the functional organization of the brain (2)

03- C Understanding the etiology of CNS diseases/disorders (2)

04- B Understanding dev. of CNS

05- Discovering new neurotransmitters like peptides + neuro amines

06- Complete genetic library of normal human + abnormal human

07- Understanding changes in synoptic efficacy/synoptic mechanisms

08- ~~Understanding~~ how neuro transmitters work
Determine factors that bring release of neurotransmitters

09- Factors that affect receptor synthesis in healthy + diseased states

10- Understanding how neuro modulators work

11- What will allow CNS tissue to regenerate

12- Factors which govern neuronal degeneration + regeneration

13- Why brain cells don't replicate themselves

14- Interelations between different neural systems

98 DK/NA

99 NONE

C.N System

BASE: 24

Q11a BIGGEST ADVANCE IN PREVENTION/TREATMENT OF ALZHEIMERS BY YEAR 2000

(324-25) (326-27)

01 UNDERSTANDING OF ETIOLOGY/PATHOGENESIS (13)

02 UNDERSTANDING OF GENETIC CAUSES/BASIS FOR DISEASE (2)

03 FINDING A TREATMENT (3)

04 DEVELOPMENT OF DRUGS (6)

05 ENVIRONMENTAL FACTORS FOUND TO CAUSE THE DISEASE (3)

06 DIET/NUTRIENT TREATMENT (2)

07 Demonstration of its autoimmune origin

08

09 Prevention of the degeneration of specific types of neurons

10 Discovering endogenous neurotoxins & how to block the action of those neurotoxins

11 Understanding the biochemical defect

12 SURGICAL ALTERATIONS

98 DON'T KNOW/NO ANSWER

99 NONE

CNS (328-29) (330-31)

Q11b Biggest advance in prevention / treatment of SCHIZOPHRENIA

01- Classification of subtypes / subtyping the disease
02- Understanding of etiology / pathophysiology
03- Treatments / better treatments - (n/s)
04- Better anti-psychotic drug treatments (with no side effects)
05- Realization that the disease has multiple causes
06- Characterization of the genetic factors
07- Combinations of existing drugs
08- Biological basis of schizophrenia
09- Defining treatments that work on different subtypes
10- Understanding neurotransmitter + receptor alteration
11- Better prenatal care for pregnant women
12- Recognition of abnormal brain chemistry
13- Development of generic ways for stabilizing brain function
14- Discovering endogenous neurotoxins involved + blocking their actions

98 DK/NA
99 NONE

CNS

), 11c Biggest advance in prevention/treatment of epilepsy
(332-33) (334-35)

01- Better Drug Treatments (with no side effects)

02- Understanding neurotransmitters

03- Hereditary forms will be diagnosable; caught + treated early

Better obstetrics:
04- Dangerous use of oxytoxics in labor; artificial induction of births

05- Understanding of the pathophysiology

06- Better ways of controlling seizures

07- Inhibiting the formation of epileptic foci

08- Understanding of brain systems involved in seizures

09- Relationship between brain structure + function

10- Better surgical elemination of the foci of seizures in those not treatable w/ drugs

98 DK/NA

99 NONE

Q.126 Change in lifestyle which would reduce incidence/severity of CNS disorders?
(344-45) (346-47)

01 Reduction in alcohol use/abuse (9)
02 Less drug use/abuse (5)
03 Less smoking (2)
04 Less lipids (2)

05 Control of diet/nutritional changes (5)
06 Exercise (2)
07 Reduction of stress (2)
08 Control of hypertension (2)

09 Change in sexual habits/promiscuity (2)

10 Automobile safety (2)

11 More attention paid to emotional needs/deeper understanding of ones self
12 Restoration of family life
13 Taking responsibility for ones illnesses. People should not entrust doctors with so much of their care
14 Move away from toxic waste sites

98 DON'T KNOW/NO ANSWER
99 NONE

CNS

Base: 24
P6.1OF2

Q. 14a 2 or 3 important new therapies for CNS disorders by year 2000?
(363-64) (365-66)

01- Genetic engineering (8)
02- New drugs (4)
03- New/specific anti-psychotics (3)
04- New/specific anti-depressants (2)
05- Neuropeptides (2)
06- Monoclonal antibodies
07- Treatment for Alzheimers (2)
08- Tissue transplants into brain

09- Use of mini/osmatic pumps (2)
10- Treatments for disorders of learning + memory
11- Behavioral therapies
12- Protective therapies for Huntingtons
13- Use of various nerve growth factors for neuro regeneration
14- Replication of long acting drugs

16- Combination of behavioral, cognitive + drug treatments
17- Targeted drugs
18- Immuno suppressive therapy
19- Antiviral drugs
20- Prenatal interventions
21- Treatments that exploit adaptive compensatory functions of brain

22- Treatment of endogenous neurotoxins through blockade or through prevention of their manufacture
23 Drug that prevents demyelination

Q. 14a

24- Administration of trophic factors to prevent neuronal death
25- Transplantation of transfected cells to provide deficient factors

98 DK/NA
99 NONE

CNS

14c Treatment which will be replaced & if so by what
(368-69) (370-71) (372-73)

01 - Drugs will replace stay in hospitals
02 - Transplants may replace L-DOPA
03 - Drugs/Anti psychotics be replaced by drugs w/ no ~~safty~~ side effects
04 - Genetic therapy will completely replace any existing treatments
05 - Antipsychotic treatments will be replaced by combinations of existing treatments
06 - Surgical treatment (for brain tumors) replaced by chemotherapy
07 - (Anti anxiety drugs) replaced by drugs without abuse potential
08 - Electro shock eliminated - replaced by drugs + diagnosis
09 - (Anti psychotics) + tranquilizers) replaced by new drugs
10 - Nerve growth factors would replace rehabitation treatments
11 - ~~Better drugs replace be~~
11 - Tranquilizers will be replaced by new treatment for Alzheimers
~~Convention~~
~~Oral prog~~
12 - Anti psychotic/anti depress. replaced by treatments that exploit adaptive compensatory functions of brain
13 - Tropic factors for alz. could replace hydergine + anti cholinesterases administrating of
14 - Targeted drugs w/ replace current drugs

98 DK/DA
99 - DODE

-N>

Base: 24 summary
15 resp.

Q. 16C Role of traditional psychoanalytic therapy in year 2000?
(441-42) (443-44) (445-46)

01 Used by affluent people / reserved for those who can afford it (4)

02 An intellectual tool: to analyze their personalities self-improvement / self-knowledge (5)

03 To treat personality / characterological disorders (2)

04 Educational / historical interest (2)

98 DON'T KNOW / NO ANSWER

99 No role (5)

cancer

Q66 Any other area of cancer research which is more promising than those mentioned (216-17) (218-19) (220-21)

01- How to combine drugs + chemotherapy
02- Drug resistance / understanding drug resistance
03- Sequencing of total human genome
04- Cellular communication factors
05- Basic research
06- Growth factors / growth factor research
07- Design of strategies to attack therapeutically solid tumors
08- Epidemiology
09- Behavioral aspects of smoking cessation
10- Immune modulation research
11- Understanding of network systems
12- Containment of nuclear accident + industrial pollutants

98 DK/NA
99 NONE

CANCER

7a Most Important Fundamental Question which needs to be answered in order to achieve a major Breakthrough in the treatment of cancer

(222-23) (224-25)

01- Understanding mechanism of cell growth + differentiation / what transforms normal cell to cancer cell

02- Overcoming drug resistance

03- Understanding mechanisms of eliminating cells that are abnormal

04- How to control it / control of metastasis

05- Something completely unknown will answer the question

06- Detection of genotypic abnormalities

07 Identifying viruses which cause cancer

98 DK/NA

99 NONE

to Medical
nicer 11A (324-25) (326-27)
12B (344-45) (346-47)

#861018
Base: 26

For lung cancer:

11a/12b Biggest advance in prevention/treatment by year 2000?
Change in lifestyle reduce cancer?

01- Eliminating smoking (14) (11)
02- Improved delivery of combination drugs
03- Reduction in obesity
04- Identifying risk groups affected by carcinogens by means of genetic marker
05- Reduction of fat intake
06- Less salt
07- Less promiscuity
08- Living more moderately
09- EARLY DETECTION DIAGNOSIS
10- ALTERING OUR DIET
11- Learning how not to age
98 DK/NA
99 NONE

11b For breast cancer:
Biggest advance in prevention/treatment by year 2000?
(328-29) (330-31)

01- Early detection (8)
02- Nutritional changes/identification of dietary factors (3)
03- Low fat diet (6)
04- ~~Improved combined modality~~ Improving adjuvant chemotherapy - surgery plus chemo.
05- Chemotherapy
06-
07- Lactation early in life
08- Markers for patients at high risk
09- Effective/less toxic therapeutic agents
10- Antibody-linked RICIN
11- Better understanding of hormonal influence
12- Anti-promoters
13- Better treatment of early disease
14- Hormonal treatment
15- Use of monoclonal antibodies for diagnosis
16- Comprehensive screening programs
98 DK/NA
99 NONE

14a By the year 2000, 2 or 3 most important completely new types of therapy for cancer which are not available now
(359-60) (361-62)

01- Develop monoclonal antibodies
02- Differentiation agents / therapy
03- Cytotoxic compounds / drugs
04- Improved biologic response modifiers
05- Improvement in organ transplants
06- Laser surgery
07- Modification of immune system / response
08- Manipulation of gene expression
09- New methods for regulating oncogenes / agents
10- Interferon
11- Different combinations
12 IDENTIFYING GENETIC SUSCEPTIBILITY
13 MEDICATION THAT DELAYS CELL DIVISION
14 THERAPY DIRECTED AGAINST GENETIC CHANGES OCCUR IN CANCER CELL
15 NEW CHEMOTHERAPEUTIC AGENTS
16 Hormonal Antagonists

98 DK/NA
99 NONE

14c

Specific treatment which will be replaced & if so by what
(364-65) (366-67) (368-69)

01- Total breast removal will be replaced by early diagnosis

02 Surgery, radiotherapy + chemotherapy will be eliminated by better therapies

03- Breast cancer surgery will be replaced by biopsy, radiotherapy + chemotherapy

04- Splenectomies replaced by interferon + deoxycoformycin

05- Chemo. replaced by new drugs/agents: monoclonal, cytotoxic

06- Present cytotoxic therapy replaced by w/better specificity

07- Radiation therapy more localized + specific

08- Laser surgery will replace other forms of surgery

09- Radical mastectomy replaced by lumpectomy/localized surgery

10- Existing drugs replaced by improved drugs

11- Differentiation agents will replace some therapies

12- Biological drugs will replace conventional cytotoxic drugs

13- Therapy/ Drug combinations will replace CMF for breast cancer

14- Certain forms of X-RAY replaced by new agents

98 DK/NA

99 NONE

:o Medical
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#861018

14a Two or 3 most important new types of therapy for cancer not available now?

Develop monoclonal antibodies (4)
Differentiation agents (5)
Cytotoxic compounds/drugs (3)
Biologic response modifiers + maturation agents

(see new code)

17) Progress likely to come as 1 central insight or slow, piecemeal?
(375-76) (377-78) (379-80)

02 Slow piecemeal progress (25)
01 One central insight (1)
03 Both

98 DK/NA

Q6b Other area of nutritional research is more promising

P6.10F2

(216-17)(218-19)(220-21)

01- Osteoporosis
02- Obesity research
03- Digestion
04- Chemo prevention
05- Regulation of nutrition on gene level
06- Methods of determining body composition
07 NUTRIENT INTERACTION - RELATIONSHIP OF ONE NUTRIENT TO ANOTHER
08 CHRONIC RENAL DISEASE
09 SOLID TUMOR CANCER
10 ADAPTING SPECIAL DIETS TO ACUTE & CHRONIC ORGAN FAILURE
11 OTHER ASPECTS OF DIET & DEGENERATIVE DISEASE
12 NUTRITIONAL NEEDS OF SMALL PRE-TERM INFANTS
13 NUTRIENT - NON-NUTRIENT INTERACTIONS
14 EPIDEMIOLOGICAL CORRELATIONS BETWEEN CERTAIN DIETARY CONSTITUENTS & CHRONIC DISEASE
15 LINKS BETWEEN DIET & CANCER & DRUGS & CANCER
16 UNDERSTANDING NUTRIENT BIOAVAILABILITY & THE EFFICIENCY BY WHICH WE ABSORB NUTRIENTS FROM FOOD
17 SIGNIFICANCE OF NUTRIENT IMBALANCES & INDIVIDUAL NUTRIENT TOXICITY
18 BIOLOGICAL SIGNIFICANCE OF PROTEINASE INHABITORS
19 FATTY ACID METABOLISM
20 DETERMINING NUTRIET REQUIREMENTS FOR SPECIAL POPULATIONS / INDIVIDUALS
21 GENETIC METABOLIC & PSYCHOLOGICAL FACTORS THAT EFFECT FOOD INTAKE
22 EFFECTS OF DIETS ON PSCHOLOGICAL & BEHAVIORAL FUNCTIONS
23 EFFECT OF DIET ON GROWTH & MENTAL DEVELOPMENT
24 EDUCATING THE POPULATION TO CHANGE DIETARY HABITS
25 STUDIES IN TASTE & FOOD SELECTION
26 ENERGY METABOLISM
27 CONVINCING FOOD INDUSTRY OF THEIR ~~BE~~ NUTRITIONAL RESPONSIBILITY

98 DONT KNOW / NO ANSWER
99- None / no others

Q68

28 Modification of metabolic & nutritive response to injury & and sepsis.
29 Nutrition and other non-immune defense systems
30 Identification of trace elements
31 Interaction of drugs & nutrients
32 Nutrition & Cancer
33 Alcoholism
34 Thermogenesis in human cells
35 Specialized use of nutrients substrates treating specific disease
36 Regulation of nervous system by nutrition

98 DK/NA
99 NONE

utrition

#861018

Q. 7a Fundamental question which needs answers to achieve breakthrough in nutrit. research?

2-23)(224-25)

01- Better understanding of details/metabolism at molecular/cellular level

02- Role of specific nutrients/nutritional patterns in cancer/hypertension/brain disease

03 ROLE OF NUTRITION IN IMMUNO-MODULATION

04 MECHANISM OF ACTION OF VITAMINS & MINERALS

05 BIOCHEMISTRY BEHIND THE IMMUNOLOGY OF CANCER

06 TO DETERMINE RELEVANT OUTCOME MEASUREMENTS IN INFANT NUTRITION

07 RESEARCH INTO ENERGY METABOLISM

08 NUTRIENTS & THEIR INFLUENCES ON GENETIC EXPRESSION

09 HOW TO MEASURE DIETARY INTAKE ON LARGE GROUPS OF PEOPLE/DIFF. PEOPLE

10 UNDERSTANDING WHAT CONTROLS OBESITY/FOOD INTAKE/SELECTION

11 MEASURING INDIVIDUAL DIFFERENCES IN MONITORING INDIVIDUAL REACTIONS TO STRESS

12 Understanding metabolism of brain

13 Genetic influences on the metabolism

14 REGULATORS OF BASIC METABOLIC PROCESSES

15 INTERACTION OF NUTRIENTS. HOW WHAT PEOPLE EAT AFFECTS THEM

16 UNDERSTANDING METABOLIC PROCESSES & INDIVIDUAL DIFFERENCES

17 EARLY LIFE NUTRITION INFLUENCE ON LONGTERM RESISTANCE

18- NATURE (DIS.) of metabolic reg. of whole intact Genome

19 Function of the enterocytes

20 correlation of intracellular particles w/intermediary metabolism of foodstuffs

21 control of appetite & body weight

22- SYSTEM FOR RAPID ASSESSMENT of nutritional status

23- BIOCHEMICAL SUBSTRATE (FINANC) TO FUEL CELLS TO REACH ITS MAXIMUM POTENTIAL

98- DK/NA

99 None

Bio Medical
Nutrition

X.10a Biggest nutritional advance in prevention of cancer?
(328-29)(330-31)

01- High fiber diet (2)
02- Reduction in calories (2)
03- Dietary prevention of cancer (3)
04- Discovery of promoters of cancer in foods (2) RELATIONSHIP of nutrients to cancer
05- Low fat / defining roles of fat (2)
06- ~~Molecular basis of various nutritional problems~~ accessing Vit. A as imp. / VITAMINS
06- Use of ~~oral~~ vitamin A analog / roles of dietary betacarotene, vit. A
07- Nutritional support for therapies: radiation, chemo., surgery
08- Modifications of current therapeutic measures of drugs + radiotherapy
09- Manipulations of immunological functions
10- Mind + mental regulation
11- Factors which prevent normal cells from behaving properly in presence of malignant cells
12- Use of fibers which will bind fatty acids
13- Stop growing tobacco
14- Greater change in fast food preparation
15- Use of vitamin A, B12, FOLIC ACID TO PREVENT CHROMOSOME DAMAGE
16- Stop contaminating air / water / food
17- Diet concentrates on available carbohydrates

98 DK
99- None

Bio-Medical
Nutrition

Q 106 Biggest nutritional advance in prevention of heart disease?

(332-333)(334-35)

01- Dietary control of blood cholesterol levels / lower cholest
02- Reduce fat intake
03- Public education
04- Role of 3/fatty acids (omega) (2)
05- Control of calorie intake
06- Physical activity
07- HYPERTENSIVE DISEASE AS IT RELATES to Sodium / potassium / calcium
08- Control of lipo proteins / lipids
09- Prevention w/ eliminating selenium deficiency
10- Dietary modification / controls
11- ~~Nutrition~~ Dietary prev. of atherosclerosis
12- Use of specialized formulations of non-metabolizable lipid analogs
13- Reduced arteriosclerosis disease
14 Control via nutrition of obesity ~~hypo~~
15 identify susceptibles + treat them
~~16~~ 16 ~~Better diets~~ High fibers
17- change in lifestyle
18- ~~develop tpa~~
19- combin. diet, drugs, physical activity
20- ability to reduce atherosclerosis lesions in arteries
21- use of ~~sea~~ resins to bind bile acids
22- understand role of fatty acid in regulation of cholesterol metabolism

98 DK/NA

99 NONE

Bio Medical
Nutrition

210c Biggest nutritional advance in prevention of obesity?
336-37)(338-39)

01- Greater emphasis on physical activity
02- Public education
03- Caloric control / Eating less
04- Understanding the genetic factors that influence obesity
05- Clarification of the role of brown fat
06- The use of lipid analogs
07- Development of appetite suppressant drugs
08- Obesity Assessment
09- Development of peptides that control satiety naturally
10- Development of effective drug therapy that is safe
11- Understanding energy metabolism & regulation of energy storage
12- Dealing with satiety / Diets that will increase satiety
13- low fat diet
14- Change in lifestyle
16- Greater intake of vegetables & fruit
16- Total diet rather than isolated elements
17- Behavior modification toward certain foods
18- Appetite controlling mechanism
19- Understanding how the body senses its energy balance & the subsequent effect on food intake
20- CAN BE PREVENTED IF CONTROLLED EARLY IN LIFE
21- SAFE METHODS OF CONTROLLING FAT STORAGE TO ALLOW THE FAT TO BE BURNED OFF AS HEAT
22- ALTERNATIVELY SAFE REGULATORS OF FAT METABOLISM TO INTERFERE W/ THE LAYING DOWN OF FAT
~~23- NUTRITIONAL + METABOLIC FACTORS RESPONSIBLE FOR IMBALANCE OF FOOD~~
23 PSYCHOLOGICAL/~~AS WELL AS NUTRITIVE CHANGES~~ PSYCHIATRIC SOLUTION
98- Don't Know / No Answer
99- NONE

NUTRITION

Q-11a

01- Incorporating beneficial fatty acids in foods / use of 3 fatty acids
02- Diets tailor made to modify psysiological function lifelong in people
03- Drug-nutrient interrelationships / treatments
04- Identify compounds that modify feeding behavior
05- Knowledge of nutritional interactions
06- Developing of diets for all nutrients + all diseases
07- Use of purified pancreatic enzyme preparations
08- Insulin pump
09- Monoclonal antibodies + targeting
10- Prenatal (Infant) nutritional supplements
11- Diet improvement for school children
12- Diets (Nutritional) which moderate psychiatric illness / for use in therapy
13- Nutrients for prematures
14- Agents absorbed + affecting cellular receptors not enter into intermediary metabolism
15- Drugs that prevent catabolic processes
16- Liposome delivered medicines
17 Artificial feeding devices
18- Over the counter foods designed ~~specifically~~ for specific diseases
19- Developments in TPN
20- Nutrition of ill patients / identifying nut. risk for selective surgery / treatment
21- Diet of less fats
22- Understanding of correct calcium intake
23- Ability to monitor glucose-insulin
24- Ability to access individual nutrient requirements

XIIa. NUTRITION

25- ~~Total parenteral nutrition~~
26- Nutritional therapy for prevention/treatment of osteoporosis
27- Nutrient combinations which affect people differently
28- Genetic corrections of inborn errors of metabolism
29- Driving nutrients across cellular membrane
30- Induction of enzyme deficiency
31- Nutritional therapy that improves muscle performance
32- Nutritional therapy beneficial to body but harmful to viral infections/cancer
33- Diets free of a single particular nutrient
34- Nutritional therapy for chronic renal disease
35- Meeting trace mineral requirements for patients on prolonged parenteral nutrition
36- Altering nutrition w/out complications of liver in newborn
37- Binding bile acids which lowers cholesterol
38- Intravenous amino acid mixtures which modify neurotransmitter behavior
39- New sources of protein
40- Understanding of marginal deficiencies + able to treat them
41- Nutritional therapy for disorders of central nervous system
42- Amino acid analogs useful as substitution for naturally occurring amino acids
43- Broader availability of micronutrients
44- Recognition of nutritional factors that delay aging
45- PRODUCE ON FARMS BETTER MEATS/EGGS
46- use of VITAMINS (C, E, BETACAROTENE) TO PREVENT CANCER

98 DK/NA
99 NONE

Q-11c NUTRITION

01- Present fad diets replaced by new fad diets

02- High potency vitamins will be replaced by carotenoids

03- Intravascular microscopic techniques w/dietary therapy will replace heart surgery

04- Polyunsaturated + low cholesterol diets will be replaced

05- BYPASS SURGERY REPLACED BY NUTRITIONAL THERAPY

06- LOW CHOLESTEROL DIETS WILL BE REPLACED BY OTHER APPROACHES

07- SURGICAL APPROACHES TO OBESITY REPLACED BY PREVENTION/DIET

08 Precise measurements of energy consumption by individual not populations

98 DK/NA

99 NONE

Bio/Medical
Nutrition

#861018
Base: 27

Q20 Most important advance in total parenteral nutrition?

01- Improved methods to reduce complications/ adverse reaction/infection (3)

02- Finding ideal combinations/solutions for specific conditions (2)

~~Defining the requirements for trace elements~~ (2)

03- Improving combination/solutions generally

04- simplification to require less supervision. Better preservatives pumps, line technology.

05- Capitalization on TPN as an experimental tool for better understanding of human nutrition

06- Being able to treat outside the hospital

07- More knowledge about nutrient requirements & interactions

08- Improved high energy sources

09- Advances in equipment & the logistics of administration

10- Attempts to make it more balanced generally

11- longer activity

12- DEFINING REQUIREMENTS FOR TRACE ELEMENTS

13- PREDICTION OF ITS EFFECT ON DRUG METABOLISM EFFICIENCY & TOXICITY

14- Clearer indications of complicated cases & the ability to handle them

15- POLYGENERIC NUTRIENTS

16- learning how to monitor patients so we tailor the amounts to their daily needs

17- SYSTEM WHICH INTRODUCES NUTRIENTS TO LIVER FIRST

18- for low WEIGHT infants

98 Don't Know/No Answer

99 None

BIO-MEDICAL

NUTRITION

#861018

Q21 MOST IMPORTANT ADVANCE YOU FORESEE IN ENTERAL NUTRITION

(370-71) (372-73)

01 Total replacement of parenteral nutrition

02 Development of more efficiently absorbable diets

03 Use of more elemental formulas & management of intestinal diseases

04 Furthering the use of enteral nutrition in the developing countries

05 Better use of the proper formulas for malnurished children

06 Understanding the bio-availability of different nutrients in the diet

07 Understanding dietary component interactions

08 Returns to simpler, less expensive formulas

09 Obesity Control

10 Pharmacologic treatment of gastrointestinal dysfunction to endotoxin

11 Understanding the role of early nutrition in adult obesity

12 Products for specific conditions

13 Defining & incorporating trace elements into enteral nutrition

14 Development of guidelines for use with drugs

15 Shift in populations diet away from saturated & high fat diet

16 A loss of fear of eating

17 Providing necessary fatty acids & minerals

18 Better ~~tolerance~~ tolerated formulas

19 Understanding & alteration of digestion

20 Knowledge of absorption patterns & metabolism of different nutrient mixtures

21 Determining digestive & absorptive capacities, tolerances

22 Side effects could be lowered

23 Risk identification

24 Tubing the stomach of a person with little mental function

25 Making them more acceptable

26 Availability of foods that have optimal mix of appropriate fatty acids & other food stuffs in a form people will choose to eat rather than taking additives & supplements

27 Education of public to eat variety of foods within the four Basic Food Groups & adjusting portion size to energy expenditure

Q21 CONT'D.

28 Public ~~education~~ understanding the balance of energy expenditure & impact
29 Increasingly substituting for preenteral nutrition. feeding the elderly, the use of supplementing feedings overnight for special problems using pumps.
30 Improvement of chemical tailoring of amino acids & fatty acids & of other micronutrients
31 New non-invasive ways to measure the absorptive capacity of each major food
32 Use of special fats to get high calorie without much volume & no problems with hyperosmolarity
33 Better definition of specific nutrient requirements
34 Making them more palatable
35. FORMULATE ~~SUB~~SUBSTRATES SO CAN TRACE PATH of ABSORPTION + NUTRITION THROUGH BODY + KNOW WHICH CELLS BENIFIT
36. USE of DIETARY MODIFICATION to MINIMIZE GENETIC INSULTS AS RESULT of RADIATION, DRUGS, & SMOKING
37- Redefinition of balance of enteral solutions
38- To understand specific tissue requirement
39- Develop specialized diet for hospital patient to and healing

98 DON'T KNOW/NO ANSWER
99 NONE